RUSTIC HOUSE: Here's how to design from the ground up, page 108

- Houston: Competition among land developers takes a load off the builder, page 90
- Basic guide shows you how to solve sewage problems, page 116
- How does the fastest builder in the US meet his schedule? page 139
- What you would have learned if you had gone to the NAHB show, page 131
Buyers shop for this valuable extra...

New "Berylstone" Vinyl Flooring by GoldSeal®

For tract units or custom jobs, you’ll sell faster with new Berylstone® paving the way. Beautiful for bedrooms. Practical for kitchens. Wherever you use it, this new vinyl makes a terrific impression. "Berylstone" is different... smart! This Gold Seal® Nairon® Standard plastic is a rugged vinyl, too. Its pattern goes deep down, so it keeps its new look for ages. An exclusive Gold Seal finishing process gives "Berylstone®" a unique surface gloss and smoothness that’s especially easy to maintain. And there’s no lining felt needed. "Berylstone®" —both tile and yard goods—has its own under-cushion for added quiet and comfort. And it fully meets FHA Title I requirements. See "Berylstone®" today!
**New Vent-A-Lite**

Now you can have an Exhaust Fan PLUS Overhead Lighting in the ceiling of your bathrooms... BOTH for the cost of ONE COMBINATION UNIT! Fan Blower is quiet and moves just the right amount of air to get rid of odors and steam.

It's ROUND... to provide more and better lighting... enough to cover the entire bathroom area. Easier to install between the ceiling 2x6 joists. Hinged lens for replacement of bulbs. Meets FHA requirements.

**New Radiant Heater**

There are many months when bathrooms are too chilly for comfort or good health. Even the homes with central heating need AUXILIARY HEAT early in the morning after the furnace has been turned down all night... or during "off-seasons".

The NUTONE RADIANT HEATER offers fast, effective, safe heat... WHEN you want it... WHERE you want it. Infra-Red Heat "bounces" in all directions and spreads its relaxing warmth throughout entire bathroom.

**Built-In Comforts for Your Bathrooms**

It's a CEILING HEATER -- plus a CIRCULATING FAN-- plus an EXHAUST FAN-- plus LIGHTING... The only Ceiling Fixture of its kind with TWO BLADES! -- Propeller for circulating warm air-- and Blower Wheel to exhaust lingering odors and damaging bathroom steam.

Best of all, the exhaust fan automatically shuts off when the circulating fan for the heater is moving. Enclosed heating element gives years of trouble-free operation.

**New Built-In Scale**

Weight-conscious Americans have made the bathroom scale a MUST in every home... but the big question is... "Where to store the scale when not in use?" Now NuTone has the perfect answer to solve this problem... with a BUILT-IN SCALE which folds out of the way when not in use.

**FREE 1958 CATALOGS AND INSTALLATION DATA**

Write NUTONE, Inc., Dept. HH2

Cincinnati 27, Ohio
NOW! a complete new line of full IH factory warranty... quality

10 hp International Cub® Lo-Boy®... lowest cost tractor-help you get for cutting costs on a wide range of the lighter jobs. You'll be amazed at its productive capacity! Loader lifts 6 cu ft or 450 pounds

23 hp International 130 gives you utility loader service at low cost... holds down your investment for equipment on odd jobs and seasonal needs. Loader can be used in combination with mowers, blades, etc.

35 hp International 330. New and really rugged! Has the built-in 'beef' to handle 1,000 pounds with front-end loader; step up yardage with choice of heavy-duty backhoes that maintain grades, digging 10 or 12-ft ditches.

6 Power sizes... unit-engineered for top capacity at lowest cost!

45 hp International 350, with gas, diesel, or LPG engine. Has the built-in brawn to handle ¾-ton with heavy-duty loader. Three models of heavy-duty backhoes match your job and your pocketbook for lowest cost.

57 hp International 450. Over 6,600 pounds built-in operating weight. Loaders handle ¾-cu yd buckets, lift 2,000 pounds over 10 feet. Backhoes take bites up to 10 cu ft, dig 12 or 13½ feet deep.

67 hp International 650 diesel gives you trenching capacity approaching that of small power shovels, with wheel tractor economy and mobility. Loads up to 2,500 lb, digs ditches to grade, as deep as 12 feet.
loaders and backhoes

service and parts available everywhere

Whether you buy on price, performance, or service—or all three together—you’ll find today’s best buy in tractors, loaders, and backhoes at your International Harvester Dealer’s. The reasons are many...all sound:

Exclusive high-capacity loader and backhoe designs, manufactured for International Harvester by Pippin and Wagner—recognized leaders in the field.

Fully warranted and nationally distributed by International Harvester Company. Factory-mounting available.

Sizes to match your job most economically—Nine loaders for six power ratings of International® tractors, 10 to 67 hp . . . five backhoes and backhoe-loader combinations for 35 to 67 hp models.

Exclusive protection against costly down time—Tractor, loader, and backhoe parts stocked by IH Dealers and at all IH parts depots. (see map)

"One stop" sales-service for all your tractor-loader-backhoe needs saves you time and money . . . see your International Tractor Dealer!

One of the 5,000 IH Dealers is near you. See him for the tractor-loader-backhoe combination sized and priced to meet your specific job requirements. He’ll gladly demonstrate!

Financing? Ask him about the IH Income Purchase Plan.

SEE YOUR INTERNATIONAL HARVESTER DEALER

INTERNATIONAL HARVESTER

See your International Harvester Dealer for the tractor-loader-backhoe combination sized and priced to meet your specific job requirements. He'll gladly demonstrate!

Financing? Ask him about the IH Income Purchase Plan.

INTERNATIONAL HARVESTER

INTERNATIONAL HARVESTER Products pay for themselves in use . . . Farm Tractors and Equipment . . . Twines . . .


FEBRUARY 1958
Virtually

SEALS OUT

Cellar Moisture and Dust!

Satisfy yourself and the homeowner with a positive way of preventing moisture and dust from coming up through the basement. Use Ger-Pak film over sub-flooring to seal out unwanted cellar moisture and dust.

All over the country successful builders agree that Ger-Pak virgin polyethylene film is the most effective, versatile moisture-vapor and dust barrier material. In addition to its superior dust-sealing and moisture vapor protection in sub-flooring, Ger-Pak film excels under slab foundations to end wet basement problems, and to reduce sidewall moisture penetration to a minimum.

And that's not all. Ger-Pak film is the ideal material for concrete curing blankets, for protecting equipment and materials from bad weather, for painting drop cloths as well as many other on-the-job uses.

And only Ger-Pak film offers the widest range of widths — from 10-inch for flashing all the way up to 40 feet. Available in clear, black and special opaque white. Ask your dealer about tough, lightweight, easy to handle, and inexpensive Ger-Pak film today.

FREE samples and brochure are yours for the writing.

GERING

Virgin Polyethylene Film

GERING PRODUCTS INC., Kenilworth, New Jersey

Designed To Meet FHA Requirements
NEW SALES APPEAL...NEW PLANNING FREEDOM

Perfection's Regulaire® "Home Conditioner"
heats, cools...fits any living area

Here's a new concept in home comfort...a year 'round heating-cooling unit so attractive, compact and efficient it can fit into any living area.

Perfection's new Regulaire "Home Conditioner" is the first unit styled for living areas. You can install it anywhere...basement, recreation room, utility room, hallway, even a living room. Think of the planning freedom this gives you! Consider the sales appeal it can add to the homes you build!

Five sizes—from 100,000 to 200,000 BTU input. Regulaire...Perfection's exclusive automatic brain...guarantees an end to cold, drafty floors...keeps air in constant circulation...keeps warm air from rising to the ceiling. Automatically controls room temperatures to within 2 degrees.

And 3-Stage Fire gives moderate fire for mild weather, high fire for cold...provides real heating economy, an important selling point to your prospects.

Whether you want gas or oil fired heating, with or without cooling, Perfection has the model that will help sell the homes you build. See the Perfection Distributor in your city for full information or write Perfection Industries, Cleveland 10, Ohio.

The homes you build deserve

Guaranteed Comfort Since 1888

Full page color ads in Sunday Newspaper Supplements will tell your prospective home purchasers why they should insist on PERFECTION REGULAIRE for heating and cooling. Ask your Perfection Distributor for full details.
For distinctive paneling...

consider **RED CEDAR**

preferred for its beauty—and because it is practical

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**RED CEDAR** beautifully expresses the trend toward wood paneling for every home setting, Early American to Modern.

In either its clear or knotty grades, Red Cedar is a favorite of architects and builders everywhere. It is handsomely grained and colored. It is one of the best natural wood insulators. And Red Cedar resists swelling, shrinking and warping, thus will not crack or split. Carpenters like Red Cedar, too. It is light in weight, readily workable and easily nailed.

For sheathing, siding, and floor and roof decking, Red Cedar is also excellent. In addition to its insulating properties, it is extremely weather-resistant. And it is carefully dried, assuring accurate sizing and improved working qualities, insuring lower maintenance costs.

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Write for FREE illustrated Facts Folder about Red Cedar to:
WESTERN PINE ASSOCIATION,
Dept. 701-V, Yeon Building,
Portland 4, Oregon.

---

**Western Pine Association**

member mills manufacture these woods to high standards of seasoning, grading and measurement

Idaho White Pine • Ponderosa Pine • Sugar Pine
White Fir • Incense Cedar • Douglas Fir • Larch
Red Cedar • Lodgepole Pine • Engelmann Spruce

Today’s Western Pine Tree Farming Guarantees Lumber Tomorrow
Today's home buyer is more interested in quality of construction and quality of building products than ever before. He is looking for better value, more convenience and lower maintenance.

You will find “Quality-Approved” aluminum windows a real asset in selling today's market. They add the “touch of quality” that buyers can see and recognize easily from either outside or inside the house. They mark you as a quality-minded builder.

“Quality-Approved” aluminum windows have been designed and constructed to meet recognized quality standards—standards that have been adopted by the FHA. What's more, the Quality Seal on these windows indicates they have been tested and approved by a well-recognized independent laboratory for quality of materials, for construction, for strength of sections and for minimum air infiltration.

For additional information consult any of the manufacturers listed below, or write direct to Dept. HH-258

Aluminum Window Manufacturers Association
45 North Station Plaza, Great Neck, N. Y.

Are the bathrooms in your model homes making sales easier?

**CRANE fixtures add the look of quality to your entire house...at no extra cost**

Our builder friends tell us: "The bathroom is second only to the kitchen when a woman shops for a home." (And you can bet she's influenced by a look of quality—or lack of it.)

Why not let your bathrooms work harder for you by using Crane—the preferred plumbing.

An attractive Crane bathroom gives people the same feeling of satisfaction they get from owning fine silver or china...or even a fine car. Yet Crane, for all its beauty, doesn't cost any more. The fixtures just look that way because they're so attractively styled by designer Henry Dreyfuss. And, because each piece is hand-finished to give a lifetime of satisfaction.

Get in touch with your Crane Builder Representative. He'll be glad to tell you about the full line of Crane fixtures...cast iron, vitreous china, steel, and exclusive Crane Duraclay. Plus many new ideas and sales aids to make your selling job easier.
...Radomatic Electronic Garage Door Operators
Add Pushbutton Sales Appeal To Every Modern Home...

Here’s How Radomatic Works

1. Touch a button on your dash. You stay warm, safe, protected in the car.

2. Your door opens automatically—the heaviest and most inconvenient task you can perform around your house done for you electronically.

3. In you go to a warm, dry, lighted garage.

4. A touch of the button closes and locks the door. You are safe—inside your lighted garage... (the light stays on for 90 seconds) then into the house—dry clothes and shoes and perfect protection.

Today, Homes That Feature
Electric Living...
Advance Designs...
All Modern Conveniences
...Should Also Feature the

Radomatic
PUSH BUTTON SERVICE

Electronic Garage Door Operators
Costs Less Installed Than Most Appliances
The dramatic action of Radomatic will be worth many times its cost in added sales appeals to every modern home. Offered as a special feature on your model and unsold homes, it will help them to sell faster.

Can be installed on all overhead-type doors. Our factory-trained installation crews and one year Service Warranty guarantee customer satisfaction.

Your Radomatic Distributor has a special offer for your model home. Write factory for your nearest Radomatic supplier.

Radomatic CORPORATION
A Frank C. Russell Enterprise
11815 Williamson Avenue • Cleveland 7, Ohio
50% Longer Guarantee

FOR BUILT-IN ACCEPTANCE IN YOUR HOMES!

Introduced on TV "TODAY" and Radio "MONITOR"
Solidly Supported by a Continuous, Colorful Campaign
in THE SATURDAY EVENING POST

The story that sells is solid quality ... and it's a story you
can sell to the hilt, when you specify Permaglas, the most highly
publicized, nationally accepted glass-lined water heater with a
guarantee 50% longer than ever before ... protection for 15 years.

HYDRASTEEL—THE PERMAGLAS SUCCESS-SECRET!

It's an amazing new steel-treating process, fresh from the
A. O. Smith research laboratories and exclusive with Permaglas.
Hydrasteel permits perfect fusion of steel with a super-tough
new glass of higher corrosion-resistance and longer life.

STRENGTHEN YOUR SALES STORY 4 PROFITABLE WAYS!

Specify Permaglas and you share the powerful prestige of
A. O. Smith Corporation, world's largest manufacturer of glass-coated
steel products ... the public's eager acceptance of the powerfully
promoted Permaglas name ... the down-to-earth, dollars-and-sense
appeal of a 50% longer guarantee ... and the massive
influence of THE SATURDAY EVENING POST.
Both style and durability outlast the longest mortgage with PALCO Architectural Quality Redwood

Whether loan money is “tight” or less restrained, permanent values are always vital to architect, builder, owner and lending agency. Things of intrinsic beauty, such as redwood in good exterior or interior design, will be as much in style and demand two decades and more from now. Inherent resistance to weather, insects and decay—unsurpassed dimensional stability and freedom from shrinkage and swelling—top paint holding ability—these are the assurance of structural soundness to defy centuries.

But the name “redwood” alone has no magic. Skilled control from forest to homesite are essential to bring out and preserve these qualities. PALCO Architectural Quality Redwood is recognized for greatest uniformity of grade, the most rigid control in kiln drying procedures, and care in shipment. Yet you can specify this premium quality at no extra premium in cost.

See Sweet's Architectural File, or write for your personal reprint of the bulletin outlining specification data, PALCO Redwood patterns, sizes, grades, grains, etc.

Specify the best in Redwood  PALCO®

THE PACIFIC LUMBER COMPANY
Since 1869 • Mills at Scotia, California
100 BUSH ST., SAN FRANCISCO 4 • 25 E. WACKER DRIVE, CHICAGO 1 • 2185 HUNTINGTON DRIVE, SAN MARINO 9, CALIF.

MEMBER OF CALIFORNIA REDWOOD ASSOCIATION

FEBRUARY 1958
MORE BUILDERS CHOOSE

Here's how the most famous garage door helps sell your homes:

- National advertising leadership
- Dramatic demonstration of radio operator
- Sales training for builder salesmen
- Free literature and point-of-purchase aids
- Local newspaper advertising
- A written guarantee covering all materials and service

OVERHEAD DOOR CORPORATION • Hartford City, Indiana

THE "OVERHEAD DOOR" TRADE MARK

THAN ANY OTHER BRAND

...and this statement has been true for the past 36 years!

© 1957. O.D.C.
In heaven, Harold now sees the light. And, as his heavenly reward for his earthly frustrations, Harold builds nothing but Dream Houses. The transition is complete. Harold is now feeler of the public pulse, purveyor of the public want, believer in the brand name, booster of the beautiful, user of the useful, seller of the saleable and builder of Heavenly Homes, all of which have

Heavenly Columbia SCREENS

Fortunately...

You don't have to be an angel to appreciate the tangible builder benefits of Columbia Aluminum Window Screens.

There is a Columbia TENSION SCREEN or a Columbia TUBULAR ALUMINUM FRAME SCREEN for every type of window.

All Columbia Screens are delivered to your exact specifications, no fitting required, quick, easy installation—no template needed—cut labor costs.

All Columbia Screens are rigidly made and carefully inspected. Every screen you install in your homes has the unqualified backing of The Columbia Mills, Inc., and its entire distributive organization.

Columbia Screens are “brand name” merchandise, known, respected and accepted by your customers as a standard of window screen value.

Your Columbia Screen Dealer is stocked and equipped to give you perfect service, not only in standard sizes but also special sizes, and he is backed by Columbia manufacturing facilities strategically located from New York to California.

Rustproof, stainproof, lightweight but rugged Columbia Window Screens are built for years of “trouble-free,” “no-service” operation.

Why not investigate all the advantages of Columbia Screens in your homes? Simply call your local Columbia Dealer, or write: Dept. 12.

THE COLUMBIA MILLS, INC.
120 W. Onondaga Street, Syracuse 1, N. Y.
PROJECT: Residence of O. G. Parkhill, Mahomet, Ill.

GENERAL CONTRACTOR: Parkhill Bros., Mahomet, Ill.

MASONRY CONTRACTOR: W. L. Gossard, Fisher, Ill.

"... has all the qualities desired for good workmanship." Says W. L. Gossard, Masonry Contractor

- Builders report the excellent workability characteristics of ATLAS MORTAR cement help keep costs down in masonry construction.
- ATLAS MORTAR mixes are plastic, require less retempering, stay workable.
- Quality-controlled manufacture of ATLAS MORTAR masonry cement maintains high product standards, assuring uniform performance and appearance on every project.

(Complies with ASTM and Federal Specifications.)

Write for your copy of "Build Better Masonry."
Universal Atlas, 100 Park Avenue, New York 17, N. Y.

UNIVERSAL ATLAS CEMENT COMPANY—member of the industrial family that serves the nation—UNITED STATES STEEL

We're now seeking a wider

PUBLIC APPRECIATION
OF SCHLAGE QUALITY

A major lock manufacturer—Schlage—is setting out to win preferred brand recognition by the general public as well as the trade.

Schlage's superior finishes and trouble-free performance have made these locks the choice of many fine home builders for a quarter-century. Now these values will be featured in striking full-color, full-page ads in Better Homes & Gardens and other magazines. New millions will know the Schlage name is their assurance of distinguished styling and top quality.

Your jobber or Schlage representative will show you how to capitalize on Schlage's national advertising in the homes you build. Or for further information write P.O. Box 3324, San Francisco, 19, Schlage Lock Company...San Francisco...New York...Vancouver, B.C.
TODAY

QUIET HOMES SELL BETTER...

- Homes are noisier today than ever before. Sound-conditioning is a real need with most families.
- Forestone® sound-conditioned homes sell better. They’re quieter, and the ceilings have a beautiful luxury look that’s especially pleasing to women.
- Your own men can install Forestone ceilings, easily and economically—at about the cost of your present ceiling materials.
- Investigate the sales advantages of Forestone today. Get full details from your local Lumber Dealer, your Simpson Certified Acoustical Contractor, or write Simpson Logging Company, Shelton, Washington.
ABOUT FEATURES THAT CATER TO HER KITCHEN NEEDS

Kitchens sell homes, and today it takes an unusually well-planned kitchen, because prospective home owners demand modern convenience in this all-important room. Convenience is the keynote in Republic Steel Kitchens. Illustrated here are just a few of the many features that can lift your kitchen out of the ordinary class... offer important time and energy saving benefits to the lady of the house. Cabinets for built-ins, tray, peninsula and Lazy Susan cabinets, plus many others, all come as stock units in the Republic line.

THE BUILDER SAVES

WITH REPUBLIC'S WIDE CHOICE OF STOCK UNITS

Stock cabinets, fully fabricated, in a wide range of sizes and styles, make modular planning and installation easy. Republic's stock oven and range cabinets will accommodate the brands of built-ins you prefer. A stock line of accessories, designed for Republic units, can give even a minimum kitchen the "custom look". Get the complete story on economical, mine-to-market Republic Steel Kitchens from your distributor, or use the coupon.
Here is the best engineered chimney ever built — by anyone. Designed and engineered by McQuay, and suitable for all fuels, (Type A) this new package chimney has a 7" stainless steel flue with aluminized steel interliner and outer casing. The interliner is supported by the exclusive McQuay stainless steel tension spring spacers for strength, rigidity and durability. There is nothing to deteriorate, nothing to collect soot. Roof housing is large, measuring 16"x20" with a 20"x24" cap.

This McQuay design permits quick drafts and even temperature from top to bottom for peak efficiency under all conditions — steady winter firing or intermittent firing in mild weather. For the best results, and for greatest economy, recommend and use this McQuay package chimney on every job.

 Territories are now being assigned. Write today to McQuay Chimneys, Inc., 1608 Broadway Street N.E., Minneapolis 13, Minnesota.

Looking down through a McQuay package chimney section. Stainless steel tension springs separate and firmly position stainless steel flue. Steel tension springs also position aluminized steel interliner and outer casing for extreme durability and rigidity. McQuay thermo siphon design and tension springs permit fast and free air flow for quick draft and even temperature from top to bottom.

Check These Features Against Those of Any Other Chimney!

SAFETY—Listed under the re-examination service of Underwriters' Laboratories, Inc., and on the approved list of F.H.A. and V.A.

ECONOMY—Costs from one-third to one-half as much as brick installed. All pre-assembly has been done to eliminate costly on-the-job time and labor.

LONGEST SERVICE LIFE—Flue is of stainless steel to permanently withstand effects of combustion gases. No cracking or chipping. Interliner and outer casing are of aluminized steel. Starter box and starter sections are in one unit for fast erection. Standard 24", 18" and 12" sections give any desired length. Average installation time is less than one hour after openings are prepared.

LIGHT WEIGHT—Load on support joists is only 9 pounds per foot of chimney length.

SHIPPED COMPLETE—With easy-to-follow instructions for installing. No special tools required. Units are individually packaged.

McQuay CHIMNEYS INC.
NOW...
YOUR ANSWER TO
CEILING CRACKS

THE EBY SYSTEM OF LATHING. Instead of staggering end joints of gypsum lath, longitudinal joints are staggered. Keycorner lath is applied to the continuous joints at 4 ft. intervals. Then, through the center of the room, one strip of 1" x 20 ga. Keymesh, 36" wide, is applied. This adds extra reinforcement where it’s needed and assures full thickness of plaster.
“I guarantee NO PLASTER CRACKS in ceilings lathed with KEYMESH and KEYCORNER”

PROMISES WILLIAM E. EBY, CHICAGO LATHING CONTRACTOR

Everybody wants crack-free ceilings. That’s why Bill Eby’s guarantee is so important to you. “Believe me, I wouldn’t make such a guarantee unless I’m sure,” emphasizes Eby. “This lathing system will give you crack-free ceilings every time. And anybody can use this system. It’s no Eby patent.

“I searched for years for a better lathing system. I tested and rejected any number of systems and reinforcements,” Eby points out. “Now after three years of using this new lathing system with Keymesh and Keycorner, I know I’m right.

“Here’s another fact that may surprise you. Builders are switching back to lath and plaster for one big reason—savings. New application systems and modern colored plaster add up to a low-cost buy. You save the costs of paint and painting. Above this, lower maintenance costs and increased fire safety make lath and plaster a top value.

Absolutely no ceiling cracks with this lathing system. You get added life from plaster. Upkeep costs are slashed. Yet Keymesh and Keycorner let me hold costs in line.”

It will pay you to learn all the facts about the Eby system of lathing with Keymesh and Keycorner and why he can make this guarantee of a crack-free ceiling.

Eby (left) inspects application of Keycorner, used to reinforce joints. Keycorner is also used at all wall and corner junctures.

Plaster is applied over reinforced ceiling. The open mesh of both Keymesh and Keycorner assures imbedment in plaster. The open mesh also insures full bond of plaster with gypsum lath.

KEYSTONE STEEL & WIRE COMPANY
Peoria 7, Illinois

Keywall • Keymesh • Keycorner • Keybead • Nails • Welded Wire Fabric
MATICO's BRIGHT COLORS
HELP YOU SELL THE MISSUS!

The quickest way to a man's check book is through his wife. That's why it's so important to build "wife-appeal" into your new homes. Nothing moves a gal to say "yes" faster than a colorful, gleaming Matico Tile Floor. She sees a sparkling background for her furnishings ... a look of envy in the eyes of her sister-in-law. She'll like hearing how easy it is to keep Matico bright, how the smart colors last the long life of the tile. (You needn't tell her how Matico saves you time and money on installation.) Remember, for your next project, add extra "wife-appeal" with MATICO.

Mastic Tile Corporation of America
Houston, Tex. • Joliet, Ill.
Long Beach, Calif. • Newburgh, N. Y.

Vinyl Tile • Rubber Tile • Asphalt Tile
Vinyl-Plastic Tile • Plastic Wall Tile

For best results we recommend Milmark® wax ... cleaner ... adhesives

MASTIC TILE CORPORATION OF AMERICA
Box 128, Dept. 14-2
Vails Gate, New York

Please send me complete information on Matico Tile Flooring.

Name...........................................

Address...........................................

City........................................... Zone........ State...........

22
Fashion right and styled for today's quality-conscious market, ALWINTITE sliding glass doors add glamour and excitement to any house. Most important are the many PLUS VALUES you get with dependable ALWINTITE—precision workmanship, attractive luster-dip finish, trouble-free operation, weathertight seal, strong sturdy hardware and locks. ALWINTITE products are backed by General Bronze, world leader in aluminum windows. Factory-trained specialists and dependable distributor organizations serve you in any area.

Write or wire for details.

ALWINTITE
by GENERAL BRONZE
GARDEN CITY, N.Y.

ALUMINUM WINDOWS SLIDING DOORS
Ador engineers apply sliding glass doors to wide range of architectural requirements.

48' wide opening was custom engineered by Ador for this new car showroom. Note how broad entry opens up display area and acts to attract public.

Economical flush threshold is combined with Ador sliding glass doors to produce this easily entered modern pharmacy.

Striking custom engineered Ador installation in the new Los Angeles Chamber of Commerce Building. Interior patio is created by special height Ador doors combined with Ador transoms.
ways to use sliding glass doors

Can sliding glass doors be economically custom designed to meet special requirements of individual building designs?

The answer is an unqualified Yes! Ador engineers are custom engineering sliding glass door installations to an almost unlimited variety of institutional, commercial, industrial and residential construction.

Whatever the size, whatever the requirements, the Ador engineering team considers such essential points as:

1. opening spans—often extending up to 45' and 60';
2. heights — including the use of Ador doors with matching Ador transoms;
3. flush threshold and multiple stacking opportunities — with consideration of pocket installation applications; and,
4. sliding Ador window applications—with characteristics matching Ador doors.

The result is a sliding glass unit installation that meets exact performance requirements, and fully retains the architectural values of the building.

For information on special engineering and design of sliding glass doors, write: Ador Sales, Inc., 2345 West Commonwealth Avenue, Fullerton, California. Complete literature upon request.

Dramatic pocket door installation is used in this music store salesroom. Ador flush threshold provides multiple stacking feature, permits doors to "pocket" for complete concealment.

Standard Ador door installation is used in this college dormitory recreation room to provide unusual light and air circulation. Students enjoy easy entry to patio area.

Ador doors and transoms are combined to advantage in this executive office. Transoms exactly match design and details of Ador door unit.

Multiple stacking Ador door on flush threshold provides this florist shop with superior display values, plus a 12' entry for public.

Ador — America's foremost all-aluminum sliding glass door

manufacturers of the Ador, Thermo Door and Zdor — a complete line of sliding doors for every climate and every price range
HERE'S WHY

L·O·F Glass Fibers' Home Insulation

DELIVERS EXCEPTIONAL RESULTS

SAVES LABOR COST—easy one-man installation—weighs only one ounce per square foot.

MINIMIZES HEAT FLOW—fits snugly between framing members.

MAINTAINS FULL THICKNESS—made of resilient glass fibers.

EXTRA EFFICIENCY—air space between ceiling and reflective foil facing.

LONG-LIFE—ageless glass fibers provide lasting resistance to heat transfer.

SAFE—pleasant to handle. Glass fibers are fire resistant—won't rot or mildew.

You can get fast delivery from your distributor. For his name, write: L·O·F Glass Fibers Company, Dept. 21-28, 1810 Madison Ave., Toledo 1, Ohio.

Ordinary blanket insulations slump at edges or sag between joists. Improper fit reduces efficiency; wastes heating and cooling dollars.

L·O·F Glass Fibers' Home Insulation cuts these losses because of its light weight, snug fit and tab construction.
Thousands proved in residential building—low in cost, the FIAT PreCast Floor also saves labor.

The new, six building luxury apartment project to be known as 900 Esplanade and Commonwealth Promenade will have FIAT PreCast Shower Floors in every shower. Added proof that products by FIAT set the standards of shower quality.

THE PLUS IN 1238 PLUSH APARTMENTS

FIAT® PreCast SHOWER FLOORS

Only the best is good enough on Chicago's fabulous "Gold Coast"

FIAT Shower Floors permanently answer the problem of shower floor leakage and high costs. Less product cost, less labor cost and less maintenance costs are the benefits of FIAT's one-piece unit cast in a solid, monolithic slab with genuine marble chips. The FIAT PreCast Shower Floor is simply placed into position and lead caulked to the drain outlet. Once this simple, fast, inexpensive job is completed, the shower wall may then be built of any type material desired; plastic or ceramic tile, marble, plaster or structural glass.

Send for specifications on the complete range of styles and sizes.

FIAT METAL MANUFACTURING CO.
9317 Belmont Ave. • Franklin Park, Illinois
Since 1922... First in Showers • Packaged Showers • Doors • Floors • Toilet Room Partitions

OTHER COMPLETE PLANTS: Long Island City 1, N. Y.; Los Angeles 63, Calif.; Orillia, Ontario, Canada
Builders are going to build better homes in 1958 because buyers are going to be more selective. Money for housing will be available to the builder who has the home features that buyers want. One way to build this quality into a home is to use Ponderosa Pine Woodwork—wood windows, panel and louver doors, entrances, mantels, cabinets, moulding and trim. All these woodwork items are properly designed to suit the architectural styles in current demand. And, we are making certain that prospective home buyers realize the value of Ponderosa Pine Woodwork in the homes you build... with ads like these in leading National magazines.

To help you identify your homes with Ponderosa Pine Woodwork, send for the Free, Builder-Designed Model Home Merchandising Kit. This kit shows the folders, pamphlets and stickers which are available free for distribution in your model homes.
She's Seeing Her Dream Home with

WINDOWS OF Ponderosa Pine

Dream homes with Ponderosa Pine Woodwork are homes of beauty, charm and livability because of the personality and character of wood itself. Wood window units give homeowners weather-tightness to keep out cold, heat and dust. They are preservative treated; can't rust or corrode. With wood windows, moisture doesn't form on the frame to damage walls, draperies or other valuable furnishings. These are reasons why Wood is preferred 2 to 1 over any other window material for American homes today.

LOOK FOR THIS SEAL OF WINDOW QUALITY

The American Wood Window Institute seal on windows is your guarantee that they conform to U. S. Department of Commerce Standards and are:

Correctly designed
Properly constructed
Preservative treated

Made from carefully selected kiln-dried lumber
Properly balanced
Efficiently weatherstripped

Ponderosa Pine WOODWORK
39 S. LA SALLE STREET
CHICAGO 3, ILLINOIS

An Association of Western Pine producers and Woodwork manufacturers

There are authentically styled Ponderosa Pine Window units to match any architectural design from colonial to modern. Wood windows can be painted, stained, varnished or waxed to meet any decor—inside and out.

Before you buy or build, ask your architect, builder or lumber dealer about Ponderosa Pine Woodwork—windows, panel and louver doors, entrances, mantels, cabinets, moulding and trim.
Mr. E. W. Becker
Sales Manager
Fedders-Quigan Corp.
Maspeth 78, New York

October 22, 1957

Dear Mr. Becker:

I wanted to drop you this personal note of thanks for the major contribution the Fedders Adaptomatic made to the success of our Fox Run Development. This 3 Horsepower model enabled us to offer the public fully air-conditioned homes at an unusually attractive price.

From the planning stage on, the wisdom of choosing Adaptomatic was confirmed repeatedly. Due to the Adaptomatic's unique split-chassis design, modification of the house plans was unnecessary. Costly plumbing and hermetic charging at the site were eliminated, and the units were connected neatly and quickly to already planned ductwork. In fact, I'd say your Adaptomatic unit saved us hundreds of dollars in each installation.

Perhaps more important was the way the Fedders Adaptomatic accelerated sales by obviously giving the prospects more home value for their money. Prospects really responded to air-conditioning in this area. I'd say it was one of those rare cases where everybody benefited.

Cordially yours,

R. M. Berkley

---

SEND FOR SPECIFICATIONS FOLDER!
Fedders-Quigan Corp.—Dept. HH-28
Maspeth 78, New York

Gentlemen: Please send me, without obligation, complete information on central air-conditioning with Fedders All-in-One Adaptomatic.

NAME________________________________________

STREET ADDRESS________________________________

CITY____________________ STATE________

FEDDERS
World's Most-Wanted Air Conditioner

Prominent builder tells how:

FEDDERS
Adaptomatic
WHOLE HOUSE AIR CONDITIONER

sold project homes faster
For Roofing Accessories...
Weathersealing
use complaint-free Follansbee Terne

Here’s Why Your Buyers Will Be Happier with Follansbee Terne

TERNE FORMS A PERFECT BOND WITH PAINT
(Just think, your buyer will not have to look at peeling and scaling paint . . . and he needn’t paint as often either!)

Terne’s lead coating is perfect for painting. It can and should be painted as soon as it is installed. No special surface preparation or primer needed.

TERNE FORMS A PERFECT SOLDERED JOINT
(He’ll never have trouble with leaks around his chimney, windows or in drainage areas!)
The lead in Terne’s coating is a natural partner for solder.

WITH TERNE, EXPANSION JOINTS ARE USUALLY NOT NECESSARY
(What a blessing for the buyer. He’ll never have loose or leaking gutters!)
Terne expands and contracts less than other roofing metals and therefore can be installed in greater lengths before expansion joints are necessary. This saves installation costs.

TERNE LASTS A LIFETIME
(He’ll not be faced with the costly job of replacing any of his roofing accessory or weathersealing metal!)
Terne has proof of its long life. Many installations are in service after 100 years.

Ask your roofing and sheet metal man. He can show you why Follansbee Terne is a better buy for you and—for that important man, your buyer.

FOLLANSBEE
STEEL CORPORATION
FOLLANSBEE, WEST VIRGINIA
Terne Roofing • Cold Rolled Strip • Polished Blue Sheets and Coils
Sales Offices in Principal Cities

FEBRUARY 1958
Cold facts on redwood

The high insulation value of California redwood means schools, homes and commercial buildings that are warmer in winter, cooler in summer, more pleasant the year around.

Specify grade-marked, trade-marked “Certified Kiln Dried” CRA redwood for uniform quality on every job.
ROUNDUP

Mortgage prices jump as market makes quick turnabout

There is now more mortgage money than builders can use in many parts of the US. The astonishing situation is the result of one of the quickest turnabouts in the market in years (see p. 38). With more money, prices of FHA and VA loans have jumped 1/2 to 1 point in many cities.

One big factor in the quick change is more buying by savings banks. They are not only buying FHA immediates but making advance commitments as well. Activity of the savings banks has produced a split-level market in many cities. Insurance companies, insisting on more down payment and shorter term, pay one price. Savings banks, seeking higher yields, offer about 1 point less but are gobbling up the last of VA 30-year, 2% down paper that both insurance firms and local lenders often spurn.

How Ike hopes to trim the fabulous cost of urban renewal

President Eisenhower's budget message (see p. 46) reveals administration plans for the most far-reaching overhaul of housing legislation in four years. But most of the President's proposals face rough going from a hostile Congress. Biggest change is Ike's middle-of-the-road suggestion that the federal government gradually scale down its urban renewal grants to write down the cost of land in slum clearance projects. The government now pays two-thirds of the difference between what slum land costs on the market (a price often inflated by bootleg profits of overcrowded tenements) and what it will be worth for honest re-use. Eisenhower wants Congress to serve notice now that this will drop to 60% in 1960, to 55% in 1961 and to 50% from 1962 on.

But US mayors, public housers, labor spokesmen and professional housing and renewal officials (whose jobs might be at stake) are raising such a hullabaloo over asking states to pick up part of the renewal check that Congress is reacting coldly to the idea. Best hope for its adoption is that Eisenhower couples this money-saving scheme with one that mayors and renewal officials like: make urban renewal a six-year program, thus assuring businessmen and planners alike that funds will be available through 1964.

Higher materials' prices expected later this year

Materials' producers, faced with dwindling profits, higher labor, raw materials and freight rates, are talking of higher prices this year despite the weak housing market. Until prices do go up, home builders will apparently get more for their materials dollar than they did a year ago. Price cutting on the dealer-builder level is widespread as dealers try to reduce inventories (see p. 54).

Will Commerce Dept. take over BLS building statistics?

All construction statistics, including housing starts, may soon be put in the hands of the Commerce Dept. Commerce officials have let word leak out that the move has already been approved by Secretaries Weeks and Mitchell. But a Labor Dept. spokesman denies it.

One reason why the report may well be true: since the Census Bureau housing inventory found 2 million more new homes in the US between 1950 and 1956 than BLS had reported as starts, the Labor Dept.'s method of collecting basic housing data is under sharp question.

Commerce personnel are already working out changes in the system of reporting housing starts, claim BLS' nearly complete dependence on building permits has left big gaps in its facts.

Support sought for FHA insurance on top 20% of loans

Conspicuous by its absence from Eisenhower's budget revelations of 1958 housing plans is HHFAdministrator Albert M. Cole's scheme to let FHA insure the top 20% of otherwise conventional 90% mortgage loans (Dec, News). The plan has run into stiff opposition from some influential Congressmen who call it a "steal" from the US Savings & Loan League's proposal to do almost the same thing through the Home Loan Bank Board. Crucial difference between the two plans is that the HLBB is now privately (i.e., S&L) owned. FHA insurance is a contingent liability of the US Treasury.

But Cole's plan is not dead. Some mortgage lenders, notably insurance companies, have greeted it warmly. At mid-month, Cole was trying to sell his idea at closed-door meetings with leaders from builders, realtors, lumber dealers and lenders.
MORTGAGE MARKET:

Money eases so fast some surpluses appear

The mortgage market is making one of the swiftest turnabouts in its recent roller coaster history. Indications are that mortgage money will continue to ease for a few more months.

Says Economist Miles Coleen: "There has been a much faster change... than anyone would have guessed." But he cautions: "When a man hasn't had a drink in 24 hours even one glass of water tastes good. Forward commitments are not yet back to normal."

There is more money now than builders in many sales-slow places can use, even in chronically money-shy areas like San Francisco where Mortgage Banker Ray Lapin comments: "We have been unable to fill the requirements of investors since mid-December."

The government, anxious to spur housing starts and buttress the slipping economy, is trying to steer more money toward home mortgages.

FHA has raised discount limits in western and southwestern states (see below), and it has ruled that closing costs again may be included in mortgages.

Fanny May has boosted its prices for FHA loans across the board by cutting its purchase and marketing fee from 1 to ½ point. But Fanny May is getting ready to unload some of its $1.6 billion secondary market portfolio (but not its old $2.3 billion management and liquidation portfolio). Noting that new offerings fell from $148 million for the first full week in December to $86 million for the first full week in January, the government mortgage agency called in its field men and told them to get ready to sell instead of buy. Says a Fanny May spokesman: "We've got some top-grade stuff and everything is for sale" (for one point more than Fanny May paid).

Best advertised government aid was the least important. President Eisenhower released $177 million in frozen funds: $107 Fanny May purchasing authority for Capehart military housing, $70 million in urban renewal capital grants and $20 million Fanny May authority for FHA builder co-ops.

The significant source of more mortgage money is savings banks.

Across the nation, mortgage bankers report telephoned pleas for loans from eastern savings banks—either immediately or futures.

Robert M. Morgan, vice president of Boston's Five Cents Savings Bank, explains: "The New York savings banks are the key to today's market and they are buying. They are making advance commitments based on a long range look at 1958." Argues another mortgage man: "Savings banks are afraid there may not be enough mortgages to go around."

Bargain-sniffing savings banks are again growing eager to give advance commitments. But Harold Finney of Citizens Mortgage Co. of Detroit says: "We would be reluctant to accept forward commitments. The market gives every indication of improving."

Insurance companies are also showing more interest in FHA mortgages.

Says Robert S. Irving, executive vice president of the W. A. Clarke Mortgage Co. of Philadelphia: "I know two insurance companies where bond departments have said 'uncle' and are releasing funds to mortgage departments."

Everett Mattnon of Houston's T. J. Bettes reports: "Insurance companies have come out with quotas equaling 1957, but all have indicated they will talk about other deals whereas last year they wouldn't even talk about anything more."

Mortgage men agree more lenders are easing up their demands for 10% minimum down payments.

Discounts on FHAs and VAs have slipped and are falling into a new split-level mold.

Savings banks on the hunt for loans are paying ½ to 1 point less than insurance companies—but they are taking minimum down payment, 30-year paper shunted by most insurance companies. Local banks—which usually insist on quality merchandise and higher down payments, are paying 99 or par in a surprising number of cities.

Prices for FHA 5 ½'s on the New York wholesale market are up ½ point on the top to 95½-97½. VA 4 ½'s are up again from 87½-89 to 89-90.

A ½ point across-the-board improvement on FHA 5 ½'s is reported in Newark and Washington. A 1-point gain on the bottom of the price spread to 96 is noted in Chicago and Denver. VAs are up from 90-91 to 92-92½ in Washington and from 88-89 to 89-90 in San Francisco.

Overall, the mortgage market continued to ease in January.

With the economic slump deepening and unemployment rising, there was much speculation that the Fed would follow its December cut of the rediscount rate with more anti-recession action. Possible steps: another cut in the rediscount rate and increased open market activity.

Effect of the first rediscount rate cut showed up dramatically in January. Treasury bills sold at 2.752% vs. 3.66 in October. The Treasury sold a $750 million short term Fanny May issue at 3½% compared to the record 4.875% paid on a similar issue in October. A key 2½% government bond issue was up to 94½, eight points over its October low.

Will FHA discount changes hurt the Midwest?

Will FHA's increase in discount limits in 20 West and Southwest states draw more money west at the expense of the Midwest? Some respected men in the mortgage business believe it will. No one disputes that the original West Coast limit of 2 points was too low, but some experts contend FHA timed its correction badly by acting just as mortgage money was beginning to ease dramatically.

Harry Held, vice president of Manhattan's Bowery Savings Bank—a major investor in out of state mortgages—calls FHA's action "the wrong thing to do." He believes eastern money which is now looking for mortgage outlets will "leap over the Midwest" and go to the West Coast looking for the biggest yield. His thought: FHA should have adopted a single national discount limit.

FHA acted in an obvious effort to spur home building. It tied the discount changes into an announcement that closing costs may now be included in FHA mortgages (see p. 62) and that it is contemplating no increase in its basic 5½% interest rate.

Discount ceiling changes: up from 2% to 3% in California, Oregon and Washington; up from 2½% to 3% in Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming; and up from 2% to 2½% in Arkansas, Kansas, Louisiana, Missouri, Oklahoma and Texas. Discount limits were cut from 1% to ½% in Massachusetts, Maine, New Hampshire, Vermont, and Rhode Island and cut from 2% to 1½% in northern Virginia.

If some lenders and midwest mortgage bankers had misgivings about the FHA changes, there was jubilation in the west. Enthused Ramond Lapin, president of the Bankers Mortgage Co. in San Francisco: "Great. It solves the problem we had in getting together with eastern banks."

Donald McGregor, executive vice president
Experts charge FHA, VA programs cut postwar housing, boosted costs

Federal Lending: Its Growth and Impact

Are FHA and VA programs self-defeating? Three nationally celebrated economists answer that question with a qualified "yes" in this new study of the impact of federal lending and loan underwriting on the US economy for the last 35 years—an impact so big the authors call federal credit a whole new banking system.

The experts: Professor Raymond J. Saulnier of Columbia University, who is now chairman of the President's Council of Economic Advisors; Harold J. Halcrow, head of the department of agricultural economics at the University of Illinois; and Neil H. Jacoby, dean of the graduate school of business, University of California at Los Angeles.

Boosts prices, not volume
"The principal objective of federal housing credit programs since 1934 has been to increase construction," says the report. But after World War 2, instead of increasing the volume, the most visible thing FHA and VA housing aids did was boost costs. Says the report:

"A comparison of the home building boom that followed World Wars 1 and 2—after allowance for changes in population and rates of family formation—strongly suggests that residential construction was actually less after World War 2 than would have been expected on the basis of post-World War 1 experience."

"The primary effect of credit liberalization [after World War 2] was apparently to be found in construction costs and housing prices. After the war, construction costs rose significantly more than costs of other types of output; and rose more for home construction than for commercial and factory construction. The main cause lay in more rapid increases in prices of building materials, particularly lumber, than of semi-manufactured goods generally. The result was that prices of

Economist Saulnier
Whither federal credit?

On the other hand, the authors charge federal housing programs with great success at cutting the cost of mortgage credit by keeping a continuous "downward pressure" on interest rates for conventional loans. In fact, they add, "the major influence may have been the long-term decline of the whole interest rate structure."

Federal housing credit has also:

Mortgage prices will rise a few more months, trend of bond prices indicates

Will discounts on VA and FHA mortgages continue to shrink for another two and perhaps as much as another four months?

The recent history of government bond prices suggests they will. For at least three years, the price of government bonds (2 1/4% issue of 1967-72) has foreshadowed not only the trend but also the price of VA minimum down, 30-year loans. Once, there was a traditional 2-point spread between the price of the 2 1/4% bonds and 4 1/4% VA mortgages. Lately, this has shrunk to the vanishing point. But bonds, responding abruptly to changes in the money market, still seem to point the way for sluggish mortgage prices. Consider:

Both bonds and VAs hit their high for the last three years in January 1955. Both were trending down. In October, bonds moved up from 94.2 to 95.2. Right on schedule, VAs moved up next January—from 94 1/2% to 96. In April, bonds veered down again, losing 3 points. VAs sagged 1/2 point in August and more in succeeding months. After the Federal Reserve cut discount rates, the 2 1/4% bonds climbed quickly last November, from 86.2 to 89.4 VAs followed in January (from 88 1/2% to 90).

Bond prices have continued to soar, reaching 94 2 last month. So many a mortgage man argues VAs—and the rest of the mortgage market—will follow.
here's help from Universal-Rundle to make your Model Home Promotion a real success

Here are sales helps that are attention-getting. They are tailor-made to your own model home. They work for you from the time you make your first announcement until home buyers pause for a special look at your bathroom. These helps are available to builders who use the sale appeal of the World's Finest Bathroom Fixtures by Universal-Rundle.

Model Home “Seller” No. 1

Four-page Brochure, especially prepared for you... depicts the features of your homes including the U/R bathroom fixtures that your prospects have seen advertised in leading magazines.

Model Home “Seller” No. 2

Counter Book in attractive easel binding... for use in sales office or on the water closet tank in the bathroom of your Model Home. Portrays the sales appealing features of the U/R fixtures in your home. Especially designed for you.

Model Home “Seller” No. 3

Feature Pointers that attach to the fixtures and highlight the extra-value features.

Model Home “Seller” No. 4

Television Films and Radio Scripts that can be used as spots or trailers.

Model Home “Seller” No. 5

Full-color Bathroom Decorating Book gives buyers exciting ideas for decorating the bathroom.

Model Home “Seller” No. 6

Outdoor Sign, announcing that your home has the World’s Finest Bathroom Fixtures.

Ask your U/R Plumbing Wholesaler for details, or write to Universal-Rundle.

525 RIVER ROAD, NEW CASTLE, PA.

Universal Rundle

MAKERS OF THE WORLD’S FINEST PLUMBING FIXTURES

Plants in Camden, N. J.; Milwaukee, Wisc.; New Castle, Pa.; Redlands, Calif.; Hondo, Texas
1. Decreased regional differences in mortgage rates.
2. Increased ratios of debt to equity.
4. Been spectacularly effective at promoting expansion of loan amortization. For example: Between 1920 and 1924, only 27% of conventional nonfarm mortgage loans by life insurance companies on one- to four-family dwellings were fully amortized. From 1940 to 1947, 90% of such loans were fully amortized. Only 15% of commercial banks' conventional mortgages were fully amortized from 1920-24. In 1940-47, 49% were fully amortized.

Says the report: "Federal housing credit... has tended to cause private lending agencies to liberalize credit terms and readjust their credit practices."

Now, conclude the authors, "insured or guaranteed loans play a leading role in residential mortgage financing and through these government programs the entire structure of housing credit has been brought under federal influence."

**MORTGAGE MARKET QUOTATIONS**

*(Sale by originating mortgagee, who retains servicing. As reported to House & Home the week ending Jan. 12)*

**FHA 5½s (Sec. 203) (b)**

<table>
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<th>City</th>
<th>Conventional Interest Rates</th>
<th>FHA Discount Ceiling</th>
<th>Minimum Downa</th>
<th>Minimum Downb</th>
<th>10% or more down</th>
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*2% down of first $10,000; 15% of next $8,000; 20% of balance.

**VA 4½s** *(Immediates)*

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<th>City</th>
<th>FHA Discount Price</th>
<th>Minimum Down</th>
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**FHA 5s (Sec. 203) (b)** *(Immediates)*

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<td>93b</td>
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<tr>
<td>Newark</td>
<td>96</td>
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<td>New York</td>
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<tr>
<td>Phila.</td>
<td>95</td>
<td>a</td>
<td>a</td>
<td>a</td>
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<tr>
<td>San Fran.</td>
<td>94</td>
<td>92-93b</td>
<td>92-93b</td>
<td>92-93b</td>
<td>92-93b</td>
<td>92-93b</td>
</tr>
<tr>
<td>Wash., D. C.</td>
<td>95/2</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
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</tbody>
</table>

**Debenture rate increased**

FHA has again increased the interest rate on its debentures—this time by 1/4% to 3.5%. The Housing Act lets FHA set a rate which does not exceed the average yield to maturity of comparable government obligations. The rate last went up in July 1957, from 3% to 3 1/4%.

Twenty-year debentures are issued by FHA in lieu of cash when a mortgage it has insured is defaulted.

**NEW YORK WHOLESALE MORTGAGE MARKET**

Prices on the open wholesale market in New York City, for out-of-state loans, as reported the week ending Jan. 11.

<table>
<thead>
<tr>
<th>FHA 5½s</th>
<th>FHA 5s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum down, 25 or 30 years</td>
<td>Minimum down, 25 or 30 years</td>
</tr>
<tr>
<td>95/2-97½</td>
<td>95/2-97½</td>
</tr>
<tr>
<td>Futures: 95/2-97½</td>
<td>Futures: 95/2-97½</td>
</tr>
</tbody>
</table>

*Note: prices are set by originating mortgage broker (not necessarily to be quoted) and usually include concessions made by servicing agencies.*

**FNMA STOCK**

<table>
<thead>
<tr>
<th>Month's Month's</th>
<th>Jan. 13 Dec. 10</th>
<th>low high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bid</td>
<td>48½</td>
<td>47</td>
</tr>
</tbody>
</table>

| Asked | 50 | 48½ | 47½ | 51½ |

*Quotes supplied by C. F. Childs & Co.*

**VA and FHA 4½s** *(minimum down, 25 or 30 years)*

<table>
<thead>
<tr>
<th>FHA</th>
<th>5%</th>
<th>20-25-year</th>
<th>20-25-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. Down</td>
<td>30-year</td>
<td>Min. down</td>
<td>30-year</td>
</tr>
<tr>
<td>3% down of first $10,000</td>
<td>95/2-97½</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>15% of next $8,000</td>
<td>95/2-97½</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>20% of balance</td>
<td>95/2-97½</td>
<td>a</td>
<td>a</td>
</tr>
</tbody>
</table>

*Quotes refer to new houses of typical average local quality with respect to design, location and construction.*

5 SALES-BUILDING suggestions for NEW HOME BUILDERS

1 FOR BASEMENT INSTALLATIONS, SPECIFY A BASEMENT FURNACE. American-Standard Air Conditioning Division makes all types of warm air furnaces—therefore has no ax to grind. But in a basement, a basement furnace makes a more compact installation, with greater visual appeal. Also, it allows ample headroom for addition of a summer cooling evaporator.

2 SIMPLIFY YOUR ZONE CONTROL SYSTEMS. Where zone controlled heating is called for, why sink money into complicated motorized control equipment which your home buyer never sees? You can get a better result at comparable cost with two furnaces, each properly sized for its zone and governed by its own thermostat. Installation is easier and you've added sales appeal.

3 FURNACE LEGS—A UNIQUE SALES ADVANTAGE. The idea of furnace legs is completely new—not only a style appeal but a practical advantage, because the basement floor can be hosed clean with no possibility of moisture entering the unit. Only American-Standard offers this feature. Note the sturdy, protective furnace bottom pan.

4 SHOW YOUR HOUSE "READY FOR AIR CONDITIONING." Where the plenum would ordinarily rest on the furnace, install the jacket for an American-Standard summer air conditioning evaporator unit. Apply a sticker reminding the buyer how easily he can add whole-house cooling and enjoy complete, year 'round comfort.

5 TAKE ADVANTAGE OF AMERICAN-STANDARD'S SPECIAL BUILDER PROMOTION PLAN. Cash in on these two current trends: (1) The increasing importance of famous brand name equipment in new home merchandising; (2) The fact that more and more new home buyers want year 'round air conditioning. American-Standard Air Conditioning Division helps you do this with a complete sales plan that exploits the brand name fully while achieving full local effectiveness for your benefit through tailor-made advertising, building site display materials and strategically timed newspaper publicity. An aggressive builder can work wonders with this package. Ask your American-Standard distributor or dealer to give you the whole story.

See your American-Standard Air Conditioning distributor or dealer
56 experts ponder how to solve the rental housing muddle

"Apartment house building has been in a bad slump that will kill the chances of halting blight in US cities unless something is done now," FHA, Oct., in reporting ACTION's $250,000 study of roadblocks to better housing.

Growing concern over this problem has now led to a unique summit conference.

Last month in Pittsburgh, 56 builders, lenders, architects, realtors, economists, lawyers, planners, industrialists and government officials met two days to study, argue and try to reach a meeting of minds about what ought to be done.

The Round Table conference was co-sponsored by HOUSE & HOME, ACTION (American Council to Improve Our Neighborhoods) and Pittsburgh's A.C.T.I.O.N.-Housing Inc. (a local merger of the 35-year-old Pittsburgh Housing Council with the Allegheny Conference on Community Development, which sparked the city's famous industrial comeback and downtown slum clearance.) Moderator was Editor P. I. Prentice of HOUSE & HOME.

No. 1 problem, overriding all other rental housing problems, is how to finance it, particularly how to woo equity investors. In the 1920's rental housing was 40% of starts. By 1956 it had dropped to 8%.

As Economist Louis Winnick, author of ACTION's rental housing research pointed out, such a declining industry is "almost without precedent for a time of high prosperity and a high level of construction. Something happened which had nothing to do with technology. Essentially it was a fundamental shift in consumer tastes. Ownership became the only form of tenure some people could afford."

What must be done to stimulate private capital to provide—in buildings old or new—the good rental housing needed in a typical city like Pittsburgh at rents people who need this housing can afford to pay?

From two days of discussion emerged these suggestions—most but not all of them apparently reflecting a substantial majority view of the Round Table participants.:

- There is no one, no simple, no easy solution. Many different solutions will have to be employed.
- In Pittsburgh, a typical US city in this respect, the great need is for better rental housing because so much of the present supply is so bad—but
- FHA, in today's economy, appears absolutely essential to produce low-equity rental financing. Without it, little rental housing will be built except for the luxury market.

Reason: minimum investment is almost the only way to make rental property yield enough profit to attract many investors, and, at the same time keep rents low enough to attract many tenants in the face of the competition from low down payment FHA home ownership.

- To succeed, an attack on rental housing problems must make the total housing supply—old and new—work in its favor. Code enforcement must force existing housing to be brought up to standard or be removed from the market. The fact that about 20% of families move every year makes this more feasible than is realized. The 20% annual turnover in most public housing can provide a community resource for re-housing many families.

- Regional planning should designate what parts of metropolitan areas are suited for low-cost and what parts are suited for high-cost rental housing. High land costs close to city centers argue in favor of redeveloping such sites with higher rent units and building low-rent units further out on cheaper land. Moreover, the need of US cities for good, close-in dwellings is so great it seems fruitless to insist on building new rental housing for the hard-to-serve lower middle-income market if part of the need can be met via cooperative housing or via the very effective mechanism developed since World War 2 which makes home ownership available on a very thin initial equity—that is, ownership with only a nominal down payment.

- One way to get rental housing built in big quantity might be to revive 100% FHA loans, relying on cost certification to prevent mortgaging out. But even this, under the rules builders anticipate would be imposed, would mean no profits for perhaps 10 years—double what rental investors are generally willing to wait today.

- A minor change in federal tax laws to give real estate trust the same tax treatment as stocks and bonds should be explored. Reason: 1) the present law may contain inequities and 2) if so, removing them would provide a powerful inducement to bringing equity capital into rental real estate.

- Under the present law, the income of an investment trust holding stocks and/or bonds can be passed on to the beneficiaries without tax on the trust income as such. A real estate trust, on the other hand, is subject to the full corporate income tax before its earnings are distributed. It is argued that income from stocks is taxed at corporate rates before it goes into the investment trust, whereas no such corporate tax comes off a realty trust's operating income. On the other hand, investment trusts whose holdings are bonds are not subject to corporate income taxation.

- Whatever the faults of the filter-up process, it works faster in rental housing because renters move on the average of once every four years whereas owners tend to stay put. Already, researchers report a "tremendous loss of population" in near-slam neighborhoods, not from code enforcement but from normal operation of the housing market. Decanting population from lighted and near-blighted areas should be encouraged, for the less overcrowding the easier it is to clear and develop worn out parts of cities.

- People shy away from investing in rental reality because it's so much easier to make some money some other way. But the promising record of Cleveland Development Foundation suggests that businessmen with a stake in good housing for their cities can be persuaded to put up more money for low-rent (say, 4 to 8%) investment in rental units.

- Everybody should understand that a builder is only a builder and does not have enough capital to tie his money up in long term rental investment and still continue to build. It is no more possible for rental builders to stay on as equity owners than it would be for General Motors, for example, to use its own money to remain year after year the owner of most of the automobiles it manufactures.

- A major deterrent to providing rental housing in redevelopment projects—where much of it must be built—is not only the costly headache of building under close government scrutiny, but also the manifold delays in land clearance procedures. Some builders now complain that their capital is often tied up almost as long waiting for land clearance and approval by layer after layer of government authorities to start construction as it is tied up after that.

- Therefore, cities should take steps to develop a stockpile of cleared slam land even before final plans have been completed for its reuse. Newark, N.J. has provided the nation with an example worth study by proposing to get authority from its state legislature to create such a land reserve.

- The lowest cost housing that can be built today in most close-in areas of cities (excepting a few of the very biggest cities) is probably row housing. Much row housing has been criticized as monotonous but the dreary endlessess of city neighborhoods can be avoided if architects will mix high rise with low rise structures and plan relieving spots of green and open space.
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ASK HIM ABOUT THE PROGRAM—Get complete details on Comfort-Conditioning, the program that tells the public about your homes, shows them the advantages and then sells them on buying. Find out why the Comfort-Conditioned Home is the sales-building idea for today's tougher market.

ASK HIM ABOUT THE ADVERTISING—Find out how four-color, full page advertising in LIFE will show millions what a wonderful buy a new home is when it offers the comfort of full insulation, the convenience of full "Housepower," the advantages of new features like indoor-outdoor living, low-cost air conditioning, more original equipment with the mortgage... all under the sales concept of the Comfort-Conditioned Home.
CAN SELL MORE HOMES IN '58

ASK HIM ABOUT THE MERCHANDISING AND PROMOTION—Get the story on what the Comfort-Conditioned Program will do to put extra sales appeal into your model home. Find out how modern appliances and other work-saving products will help sell from the model for builders who qualify. See how identification signs, sales aids, advertising and merchandising ideas, and prestige products will all contribute to selling the Comfort-Conditioned Home.

ASK HIM TO SHOW YOU THIS PRESENTATION—Whether you write, wire, phone or send the coupon at right, make sure you see "What Will Sell Houses . . . This Year and Next?"—the complete story on Comfort-Conditioned Homes.

FEBRUARY 1958
HOUSING POLICY:

Congress cool to Ike’s housing plans

Not since the Presidential housing policy commission of 1953 has the administration brought forth such a sweeping package of new housing proposals as President Eisenhower sprang last month in his budget message (see text, p. 47). In 1953 and ’54, Ike had a friendly, Republican-controlled Congress. It adopted the administration’s ideas without substantial change in the celebrated Housing Act of 1954—despite the ill-timed FHA windfall scandals which might easily have wrecked the legislation.

This year, the President’s middle-of-the-road housing plans face a hostile, Democratic Congress. It can be expected to fight—and probably reject—almost everything he proposes.

Housing’s non-partisan days are over.

If private housewars want to make the President’s recommendations law, they will probably have to plunge into Congressional and Senatorial elections at least as fiercely as public housewars and labor unions, whose views on how the government should rig the housing market are capturing more and more support in Congress each term.

So far, private housewars have shown little inclination to do so. The prevailing attitude seems to be: “What’s the use?”

Eisenhower’s proposals—and their chances in Congress:

1. Urban renewal’s federal aid should be scaled down gradually in three ways:
   - Starting in 1960, localities should begin to pay more than today’s one-third of the land write-down for redevelopment projects. Specifically, Ike urged Congress to cut the federal share to 60% in 1960 to 55% in 1961 and to 50% from 1962 on. This is the outgrowth of much-debated suggestions that renewal is an area where the federal government should turn over its responsibilities to states, along with tax areas to finance it. But Congress is talking about boosting federal aid to renewal, not cutting it. Chances for Ike’s ideas look dim.
   - Local communities should share renewal planning costs from the start of projects. Now, the federal government puts up planning money, gets it back only if projects based on the plans are carried out. Renewal experts say some 30% of the $21.4 millions advanced for planning so far has been wasted by this method. But cities will oppose such economy and Congress will probably kill it.
   - States should set up special urban development, housing and metropolitan planning agencies. These should take over supervising and financing planning of renewal projects.

2. Urban renewal should be put on a permanent basis to spur cities to beef up their attack on slums.

Specifically, Congress should approve a six-year program, authorizing $250 million a year for capital grants in fiscal 1958-59, another $250 million for 1960 (with federal aid cut to 60%), $250 million for 1961 (with federal aid cut to 55%) and $200 million a year for 1962, 1963 and 1964 (with federal aid cut to 50%). Congress may well accept the six-year authorization. City housing has been clamoring for it. But sentiment is strong for authorizing at least $350 million a year. Some want as much as $500 million a year.

3. Government should guarantee local bonds to finance non-residential renewal projects which need no federal grant.

This looks reasonably non-controversial.

4. Fanny May should no longer be forced to buy special non-residence mortgages at par.

Eisenhower realized denying FHA aid to the top of the housing market is probably bottlenecking a general upgrading of US housing standards (Dec., News). Few Congressional observers give this proposal much chance.

5. FHA’s mortgage ceiling on its basic Sec. 203 program should be boosted from $20,000 to $30,000 to make FHA’s easy terms available “for larger and better houses.”

On Capitol Hill, Republicans won’t fight for this one. Democrats will oppose it, arguing that FHA aid should be reserved for middle-income families. Nowhere is there any sign that Congress realizes denying FHA aid to the top of the housing market is probably bottlenecking a general upgrading of US housing standards (Dec., News). Few Congressional observers give this proposal much chance.

6. FHA’s mortgage ceiling on Sec. 221 (housing for renewal displacees) should be boosted from $10,000 to $20,000 (for single-family homes).

This has a better chance because it wears the sacrosanct mantle of help for minority families, who are chief group of displacees. Moreover, city after city complains it cannot build 211 housing inside the $10,000 cost limit.

7. Discount controls on FHA and VA mortgages should be repealed.

Eisenhower notes that controls “discourage private financing of military housing and certain other FHA mortgages [which therefore become a Treasury burden] and . . . prevent many Korean veterans from using their loan guaranty benefits.” But Democrats in the Senate are married to artificially low interest rates. Discount controls are a device to limit interest rates. Repeal has only a slim chance.

8. Interest rate ceilings on FHA rental, cooperative and military housing programs should be boosted.

The President’s reasons are familiar: “to make these loans more attractive to private lenders and cut the drain on the Treasury from financing them through Fanny May. Sec. 207 rental housing and Sec. 213 co-ops carry a politically frozen rate of 4½%. Military housing is pegged at 4%. Sources close to the administration predict Eisenhower will suggest all three be lifted to 5%—the present limit for FHA Sec. 220. This might go through, but it is no cinch.

9. FHA should get a five-year boost in its mortgage authorization—$3 billion a year.

Up to now, FHA has never sought insurance authority for more than a year or two ahead. This will run into stiff Congressional opposition, largely from pro-public housewars who want to be able to hold FHA hostage each year for an extension for public housing. FHA will be lucky to get $3 billion more authority for one year.

10. Scope of college housing loans should be restricted and the government should stop making them at less than it costs the Treasury to borrow money.

Chances for a change are only fair.

11. FHA’s makeshift housing for the elderly program (under Sec. 207) should be replaced by a new, more liberal section of its own.

The administration has yet to reveal details of this plan, but help for senior citizens is popular with both parties.
Full text of the President's budget message on housing

Last year our population increased by 3 million people; before another decade passes it will exceed 200 million. Almost 60% of our people work and live in the 174 metropolitan areas where the growth has been in the suburbs. The rapid growth of our population and its increasing concentration in urban and suburban areas has created unprecedented problems for both industry and government in helping achieve the goal of a decent home and a suitable living environment for every American family.

Private industry and state and local governments have the basic responsibility for helping families meet this goal. The federal government can help by guaranteeing loans, encouraging the private market for housing obligations, and by making limited grants to state and local public agencies. We must avoid unnecessary reliance on direct federal financing. Such financing not only burdens the taxpayer but, more important, by discouraging private financing, limits the total amount of housing activity. To increase the effectiveness of federal aids, important revisions are proposed in this budget.

More help from states

Under the Housing Acts of 1949 and 1954, the Urban Renewal Administration makes loans and grants to help remove or prevent the slums which obstruct the orderly development of our cities. In July 1957, 178 federally supported urban renewal projects in 122 cities were actually in process of clearance and re-development, and plans were underway for 254 more projects in these and 142 other cities. By the end of the first decade of the program in 1959, over 600 projects will be either completed or in the planning or development stages.

Now that this important program is well underway throughout the nation and the gains to participating communities have become well recognized, I believe the time has come when state and local communities should assume a share of the administrative responsibilities and financial costs more nearly commensurate with the benefits which their citizens derive. To this end I am recommending a fivefold program:

1. In the future, local communities should share the costs of planning from the start. In the past, in most instances, the federal government advanced all the money required for planning projects, and the local share was paid only if and when projects based upon these plans went forward. The substitution of this cost-sharing formula for the previous advances will encourage more careful programming of individual projects and will mean fewer cases in which projects are abandoned after significant federal outlays.

2. I strongly support the recommendation of the joint federal-state action committee that each state establish a special agency for urban development, housing and metropolitan planning to assume, as soon as possible, the financial responsibility for local planning of urban renewal projects. Adoption of this recommendation will be a constructive first step toward placing the responsibility for federal insured mortgages on housing in urban renewal areas and on housing for families displaced by this and other government programs. The amount of these mortgage purchase commitments arises partly from the statutory requirement that all purchases by the association be made at par—considerably above the prices which private lenders would be willing to pay. As I have previously urged, this requirement should be repealed. With more realistic mortgage prices, it should be possible to restore the incentive for private financing originally intended under the Housing Act of 1954 and thus avoid the need for additional large amounts of new obligatory authority to finance purchases of mortgages under this program and under programs for armed services and cooperative housing. Even without par purchases, however, the association will require $90 million of new obligatory authority in 1959 to purchase mortgages which are not currently acceptable to private lenders. As urban renewal receives greater local support, these mortgages should be increasingly attractive for private financing, and hence the present special assistance program for them should be looked upon as a temporary stimulant only.

How to handle displaces

An estimated 81,000 families will be displaced from their homes in 1959 by urban renewal projects, highway construction, and other governmental (primarily state and local) action. Most of these families can afford standard housing available in the private market, and, if necessary, they can obtain insured mortgages for loans by purchase by the Federal National Mortgage Assn. To make this program effective in high cost areas, the maximum amount of a mortgage that can be procured should be increased from $10,000 to $12,000 for single-family homes. The Public Housing Administration has authority to meet anticipated requirements from local public agencies for loans and contributions to support the needed housing for families of lower income. To assure orderly provision of such units, the time limits governing this authority need to be extended beyond present expiration dates.

With the expiration in July 1958 of the special loan guaranty benefits for veterans of World War II and of the housing loan program for all veterans, FHA again becomes the only federal agency providing comprehensive insurance or guaranties of private housing credit. Congress last year liberalized the terms under which FHA mortgages were insured, making broader benefits available for the general public, including veterans.

End discount control

To strengthen further the mortgage insurance and guaranty programs, I shall recommend legislation to revise ceilings on interest rates and to remove discount controls which now discourage private financing of military housing and certain other FHA-insured mortgage programs which prevent many veterans of the Korean conflict from using their continuing loan guaranty benefits. To make the liberal terms of insured mortgages available for larger and better homes, the maximum mortgage amount on owner-occupied housing should be increased to $30,000. To provide more effective financing aids for housing built for the elderly, the special provisions in existing programs should be liberalized and consolidated into a separate rental housing program for the elderly. To provide continuing assurance to home buyers, builders, and lenders of the availability of mortgage insurance, an additional $3 billion per year should be authorized in the maximum permissible dollar amount of outstanding FHA-insured mortgages during each of the next five fiscal years.

To meet the increased needs for college

*Continued on p. 56*

FEBRUARY 1958

News

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PRESIDENT EISENHOWER

Cold war with Congress?

fiscal year 1959. Since over $50 million in unused authority for capital grants will remain at the beginning of 1959, more than $250 million will be available for grants in that year. For 1960, $250 million should be authorized with a federal participation of 60% of net project costs. For 1961, the amount should also be $250 million but the federal share should be 55%. For 1962-64, the amount should be $200 million annually with the federal share 50%. With the change in the statutory formula, the reduced federal grants will support a generally larger urban renewal program.

5. Consideration should be given to authorizing the Urban Renewal Administration to help local public agencies finance non-residential urban renewal projects which do not require federal capital grants by guaranteeing obligations issued to finance such projects. In many communities, the increased property taxes obtainable from this type of redevelopment are so substantial that private financing should be obtained without ultimate net cost to the federal government.

Fanny May changes

Capital grants are only part of the present and prospective requirements for federal support for the urban renewal program. It is estimated that in 1959 the Federal National Mortgage Assn. will make commitments of $250 million for the purchase of federally insured mortgages on housing in urban renewal areas and on housing for families displaced by this and other government programs. The amount of these mortgage purchase commitments arises partly from the statutory requirement that all purchases by the association be made at par—considerably above the prices which private lenders would
Which is the best way to combine heating and cooling?

It can be done in a number of ways. The best way for a particular house depends on its design, the climate, local fuel costs and many other important factors. That's why it's wise to consult the Carrier dealer in your community. He has every type of air conditioning made. (Several of the many are shown at the right.) So he's able to recommend the most efficient, economical heating-air conditioning combination for your home. Discuss your house plans with your Carrier dealer. He's listed in the Classified Telephone Directory. You'll find his suggestions invaluable. Carrier Corporation, Syracuse, New York.

Carrier

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You can do it in two stages. Install a Carrier Winter Weathermaker—"the Furnace with a Future"—now you have one half of an air conditioning system. At a later date a cooling coil and refrigeration section can be added quickly and easily.

You can do it with a heat pump. This Carrier Heat Pump Weathermaker, which uses no oil or gas, is the ultimate in modern air conditioning. Heats and cools with electricity. Two-piece design means no inside living space is taken up.

You can do it all with one control. A Carrier Control Center, like this one, is a handsome fixture that gives the home owner easy control of both summer cooling and winter heating. Change-over is made by simply moving small switch at the top.
housing arising from soaring enrollments, federal loans to colleges should be entirely for essential dormitories and faculty housing, and should no longer be made for student unions and other less essential facilities. Private financing should be encouraged by (1) replacing the subsidized interest rates required by the present statute with rates in no event less than the government's costs, (2) authorizing federal guarantees of college housing obligations which do not have federal tax exemption, and (3) prohibiting direct loans where private funds are available on reasonable terms. In addition, new obligations authority of $200 million is needed for the fiscal year 1959.

 Ike budget calls for $444 million for housing

Federal housing and community development programs are costing US taxpayers $352 million in cash outlays this year. Next fiscal year (1958-59) they will cost $444 million. A large part of the increase is going to finance programs the private industry either opposes or regards as unnecessary.

• HHFA's college housing loan program, which offers federal money for dormitories, student unions, cafeteria areas and what not at less than Treasury cost, has mushroomed from a $92 million-a-year expense in 1957 to $162 million for the fiscal year ending next June 30. And in the 1959 fiscal year, it will cost taxpayers a whopping $219 million, if Congress approves President Eisenhower's request for $260 million more loan authority.

• For the first time in some years, Fann May will put a net cash drain on the Treasury next fiscal year, perhaps as much as $229 million. Reason: the Treasury will advance huge sums to buy certain favored classes of mortgages (which it can probably sell years later at a profit). These include co-ops, military housing, housing for displaced workers, renewal projects, disaster victims.

• Public housing will cost $79 million in cash outlays. Notes the budget: "Annual contributions to local housing authorities are estimated to increase from $90.6 million in 1957 to $114 million in 1959, as more projects are completed. For the current year, PHA wants a 54% increase over the 1957 deficiency appropriation, to cover the $99.8 million it has already bound the government to pay in subsidies.

Federal housing would cost at least another $100 million if it were not for FHA, which is expected to net the Treasury a $53 million profit this year and $80 million next year. FHA expects to process applications for 600,000 units in the year ending June 30 and 635,500 units in 1959, compared with only 422,000 units in fiscal 1957.

To cope with the increased load—part of it, at least, may be anticipated deaths this summer (for World War 2 vets)—FHA wants to spend $46.4 million next fiscal year. That is a boost of $3.2 million from the current year's outlay. But the agency is planning to ask Congress for a $2 billion deficiency appropriation. "Otherwise," warn FHA men, "we will be swamped by the business we expect this spring.

Administrative budget requests of the housing agencies, compared with their expenses for the current year:

<table>
<thead>
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<th>Program</th>
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<td>&quot;MA&quot;</td>
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<td>$12,200,000</td>
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* Bookkeeping regards loans as expenditures and payments of them as receipts; million deficiency appropriation.

Views on the News:

Will 'welfare' housing undermine an industry?

By Gurney Breckenfeld

A close look at the federal budget for next fiscal year suggests that private enterprise in housing could be heading for slow-drip death.

Astronomical millions are earmarked for programs that weaken private building—particularly programs that undermine private mortgage lending (if there really is anything that any more). For instance: college housing loans—a giveaway loan deal—will cost $219 million. Loans for planning and community facilities will cost $39 million. Public housing subsidies will cost $144 million. Fanny May "special assistance" mortgage buying—at prices Eisenhower protests as above the market—will convert a $61 million profit into a $229 million expense to a Treasury already hard-pressed for cash—if Congress approves $90 million more for special assistance loans Ike plans to request.

Will race bias make slum clearance hopeless?

Is trying to end slums like trying to sweep up the Augean stables, at least in northern cities that cling to residential racial segregation?

Here is some new evidence that points in that sad direction.

Chicago's respected Association of Commerce has just come up with a new forecast of industrial growth to 1970. Between 1955 and 1960, it expects 208,000 new jobs in Chicagoland. Because of deaths and retirements, it will take some 513,000 persons to fill them. But local births and new workers will fill only 109,000 jobs. That leaves 404,000 jobs to be filled by people from elsewhere.

Elsewhere, for Chicago, as for most other exploding northern metropolitan areas, means mostly the rural South and Puerto Rico. The export crop of people from both these regions gets the minority ghetto treatment in housing.

Most of them, by education, income and living habits, are so accustomed to urban mores that already-urbanized people shun them as neighbors. But the ghettos means overcrowding. Overcrowding means slums, which are still forming faster than they are being erased.

No wonder Chicago housing experts say privately: "Whatever progress we make fighting slums, it is offset by the influx of in-migrants from rural areas—from the South and Puerto Rico." In fact, the more any one city does to ameliorate its minority housing conditions, the more in-migrants it can expect to attract.

The alternatives seem simple, though almost equally unpalatable to the prevailing US attitude. They are: 1) accept racial integration in housing and other forms of northern life and custom or 2) surrender some or many central cities to Negro political domination, probably accompanied by mushroom slum growth and (later) by either municipal bankruptcy or taxation so stiff it will drive business and industry into the suburbs amid fantastic losses in realty values, or 3) stop such wholesale migrations with a job-shattering depression.

Here by 1970, when the St. Lawrence seaway is complete, Chicago's Association of Commerce expects industry to generate 1 million new jobs. Most of them will have to be filled by in-migrants. Every new job, experts have found, creates a population increase of 2.2 people. So Chicago (pop. 6,300,000) faces a population increase of 2.2 million people in the next 12 years, mostly minorities.

Much of this torturing problem would be averted, many experts say, if the pace of migration from farm to city were slowed. There are a few crumbs of information that tight money policies tended to brake it slightly, as businessmen postponed expansion and thus dampened the demand for more workers. But America is dedicated to expansionism. Sweep the problems under a rug.
Segregation: Three more laws proposed to prohibit race bias

Demands for state and local laws to ban racial segregation in housing are spreading.

A bill to ban discrimination in privately financed and owned multifamily housing projects again has been introduced in the New York legislature. It is sponsored by Sen. George R. Metcalfe, Democrat, and Ass. Bert-rum Baker, Republican, the same two legislators who sponsored New York's present law against discrimination in apartment projects which have government financing aid (including FHA). The new measure, making it illegal to cover single-family homes in groups of ten or more. It has been before the legislature for two years, but has been stuck in committee.

Gov. G. Mennen Williams of Michigan has asked his legislature to prohibit real estate brokers and agents from accepting discrimination in handling sales and rental of housing. He proposes expanding the state's Fair Employment Practices Commission into a Civil Rights Commission to enforce the ban. The legislation in Lansing indicated the governor has broken controversial ground.

In Chicago, two aldermen are working behind the scenes to line up backing for an ordinance to bar racial discrimination in rental of privately owned apartments. The bill would be akin to New York City's first-in-the-nation ordinance making it illegal to refuse to rent or sell an apartment or other multiple dwelling housing at least three families "because of the race, color, religion, national origin, or ancestry" of the would-be occupant (Jan., News). The New York measure was signed into law by Mayor Wagner Dec. 30.

A tentative draft of the Chicago ordinance, being circulated by Ald. Claude W. B. Holman (one of five Negroes in the city council) and Leon M. Despres, would exempt single-family homes and duplexes, as does the New York law.

NY courts rule FHA-aided project must rent to Negro

A New York court has ruled that a 100-unit suburban apartment house, financed with an FHA-insured mortgage, must rent to Negroes.

The decision, first of its kind, was immediately hailed by Charles Abrams, boss of the State Commission Against Discrimination, as "a significant landmark." It affects more than 1,000 buildings with 50,000 apartments.

Owners of the building in suburban New Rochelle say they will appeal.

The anti-discrimination commission sued last July after the owning corporation, Pelham Hall Arts, Inc., refused to rent to Norris G. Shervington, a Negro and a New York office manager. The action is based on a 1956 law passed by the state legislature (the Metcalf-Baker Act) barring race bias in renting multiple-dwelling units financed in part or entirely with government aid.

The apartment owners contended they had received no financial help from the state, so it had no constitutional right to regulate who their tenants should be. But Justice Samuel W. Freer held that "what is here involved is a conflict between the rights of property owner and the inherent power of the state to regulate the use and enjoyment of private property in the interests of the public, and the power of the state, when reasonably exercised, is supreme."

Canada: Builders talk low-income housing, but admit need for better selling

Canadian builders are struggling for ways to reduce costs so they can build homes cheaper.

So far the results are meager, but builders are stepping up their efforts.

This concern dominated the Toronto convention last month of Canada's National Assn. Items:

• NHLA picked a research-minded builder for president (see col. 2).• President Stewart Bates of Central Mortgage & Housing Corp. (Canada's HHFA, FHA and FNMA rolled into one) stressed research in his convention address. "There are limits to how low-cost we can get with present methods and materials," he said. "But the technical breakthrough is coming." Recent Parliament bills to enforce the 1954 act are still pending.

• The Manitoba legislature, which has government financing aid (including FHA), has stuck in committee.

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Maurice Joubert elected president by builders

As their new president, Canadian builders elected a man who has built only 15 homes in his life.

But Maurice Joubert, 42, mayor of the Montreal suburb of Duvernay, may well become NHBA's most forceful leader yet.

Chubby, dapper, well educated in the classical tradition with a breadth of interests which make him a lively talker on almost any subject, Joubert has already won a reputation as a persuasive diplomat.

Joubert was trained as an agronomist, has been in building only five years. His prime interest, he says, is in the techniques of building. So he likes to keep clear of business operations "to be free to experiment and for creative thought."

Since 1952, Joubert's Hau'terive Development Corp. has developed or sponsored most of a 10,000-acre townsite in Jesus快速 growing suburban area of Montreal. His first project of 250 homes was Canada's first with radiant-heated slab-on-grade. The 1,700 sq. ft. homes sold initially for $12,500; quickly jumped to $14,500. Joubert developed and built only a few, then turned the project over to other builders.

Recognizing the importance of community facilities and municipal planning, Joubert was largely instrumental in creating the new town of Duvernay out of the sprawling and picturesque adjoining suburbs of St. Vincent de Paul. Rex Heslop, developer of a satellite city 25 mi. from Toronto, and Joubert's only rival for the presidency, was elected to a newly created post of first vice president. This apparently puts him in line to succeed Joubert.

Starts zoom, fueled by government mortgage funds

A late fall and winter spurt in starts has changed the house building picture from gloom to optimism.

Latest estimate of 1957 starts by Federal Minister of Public Works Howard Green is 122,000—off only 5.7% from the 1956 total of 127,311 starts. Yet in early summer when mortgage money was at its tightest-ever, many builders were predicting only 80,000 starts.

Even six months ago, government authorities were considered optimistic in forecasting 100,000 starts. Highlights of the new look:

• Starts turned up in October, spurred by the $150 million government fund for direct agency mortgages for low-cost housing.

• Most new houses—lower-cost, three-bedroom units with basements—are selling before completion. Latest figures for Ontario, Canada's biggest house building area, show starts in major centers up 16% in December over December 1956. Greater Toronto showed a gain of 172%.

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Curtis Style-Trend sliding wood windows will be advertised in the March issues of BETTER HOMES AND GARDENS, AMERICAN HOME, HOUSE BEAUTIFUL and HOUSE & GARDEN. Other Curtis window styles will be advertised in following months.

CURTIS WOODWORK heart of the home
Big news for 8,706,474 homemakers

Curtis Style-Trend Sliding Windows

Yes, more than 8,706,474 home-minded Americans will get the news about these remarkable new-style removable wood windows in the March issues of their favorite home magazines.

And it will be good news, indeed, for builders who feature Curtis windows in their model homes—and recommend them to their prospects. For these Curtis Style-Trend windows provide true weather-tightness in a sliding window—at modest cost. What's more, sash are quickly and easily removable for painting or cleaning.

Curtis Style-Trend sliding windows have attractive contemporary styling. You can use them throughout the house or combine them with Style-Trend double-hung window units or fixed sash. Variety of heights and combinations with picture windows is available.

97 window types, styles and combinations in the complete CURTIS line

Only Curtis offers so great a variety of window and door types for every home-building need, as witness the Curtis window selector chart illustrated here. A similar chart shows the wide variety of Curtis door types.

See these selector charts in the office of your Curtis Woodwork dealer. He will give you full information on Style-Trend windows and the famous Curtis Silentite line of double-hung and casement units.
MATERIALS & PRICES:

Price hikes predicted as producers’ profits shrink, costs continue to climb

Will materials costs remain stable through 1958?

Don’t count on it. There are growing signs that many producers will increase prices this year despite a weak housing market. And if housing starts spurt, then the price spiral is certain to resume after a year of marking time.

Profits, labor, raw materials and freight rates carry the chief threats of price increases.

Says H. R. Berlin, Johns-Manville general sales manager: “We are faced with increased freight rates, raw materials costs and labor rates. Couple these with dwindling profits and it can only mean one thing—increased prices.” Marvin Greenwood, Celotex’ director of merchandising, agrees: “There’s every reason to expect an increase in costs.”

Berlin predicts that higher prices in 1958 will not completely overcome falling profits. “We are particularly unhappy about this,” he notes.

Other major building material producers shy from forecasting price increases, but point morosely to dwindling profit margins. Says C. M. Linger, advertising director of Yale & Towne: “A month is as far as I would go in making any statement.”

Clyde Hess, product information manager, notes that Armstrong Cork raised prices on some products Jan. 1 to meet higher labor costs. “We’d like to think our prices have leveled but if labor and materials take another jump we’ll have to go along,” he says.

Of a dozen materials producers interviewed by HOUSE & HOME, only two—Gerber Plumbing Fixtures and Nutone—say they are not contemplating any price boosts this year.

Until the price spiral starts up again, home builders should be able to get more for their materials dollar.

Price-cutting at the builder-dealer level is widespread, reports Col. E. H. Boeckh, Washington cost analyst: “They’re cutting each other’s throats, slashing prices to pieces.” His monthly survey of building suppliers shows most are overstocked and selling cheap in fear of being caught with big inventories if materials prices slump again (Boeckh expects no slump).

“All of this cutting is coming out of profits,” Boeckh insists. “But there’s not much left to squeeze. The profit picture is very thin among suppliers.”

Lumber Dealer Clarence Thompson of Champaign, 111. concedes there has been price cutting but predicts it will end as business gets tougher: “It’s difficult enough to make a profit when volume is down. When you lose volume you get pretty realistic about your prices. When you get into a declining market as we are now it makes everyone review his pricing policy and structure.”

Builders seem certain to get more services—if not lower prices—from manufacturers and suppliers this year.

Dave Slipher, president of Webb & Knapp Communities, believes: “We will see more lumber delivered at grade this year. More manufacturers will be willing to do more promotional work for their builder-customers. And I personally think more builders will be influenced by the merchandising aids a manufacturer makes available than a price—assuming prices on similar items will be reasonably close.”

Lumber Dealer Thompson chides builders for so much bargain-hunting they force otherwise honest lumbermen to cut quality to make a profit. Says he: “I think perhaps more builders will be willing to pay a fair price for a full measure of properly graded lumber this year.”

The smart builder should be able to hold the overall cost of his houses down to the 1957 level despite some price boosts.

This is the view of Len Haeger, technical director for Bill Levitt, who explained: “Some prices will go up and some will go down a little. . . . The intelligent builder will have to do a lot of soul searching this year to decide where he can substitute and change plans to get the benefit—or avoid the consequences—of changing prices.”

Haeger repeats his advice of last fall (Nov., News) that wise builders will keep inventories low this year.

MATERIALS BRIEFS

Still more mergers

An urge to diversify and to improve competitive position is producing more mergers and plans for mergers among building materials suppliers. Items:

- Diamond Match Co. has merged with the Gardner Board and Carton Co. to become the Diamond-Gardner Corp. The new firm’s New England lumber division owns 29 retail lumber yards, two wholesale warehouses plus logging and mill facilities.

- Evans Products Co., one of the 10 biggest far plywood producers, has acquired Fiddes-Moore & Co., one of the nation’s largest independent building materials warehouse systems.

- Vulcan Materials Co. of Birmingham, Ala., has merged with nine other paving materials firms including Union Chemical & Materials Corp. of Chicago and Lambert Bros. of Knoxville, Tenn.

- American Hardware Corp. has acquired 40% of the common stock of the Savage Arms Corp. but will set up “some form of corporate relationship” rather than merge outright.

Central cooling unit sales up

Sale of central home air conditioners hit 160,000 in 1957—a gain of nearly 7% over 1956, despite a 9.5% drop in new housing starts.

Cloud Wampler, chairman of Carrier Corp., believes sales in 1958 may go as high as 250,000 units.

One important factor in the increased sales: lower prices. Average price on central cooling units was about $800 last year compared to $1,200 four years ago.

Single lumber order system

Another effort to streamline the lumber-supplying system has started in the Northwest.


The service takes lumber orders from wholesalers, places them with mills served by the company and qualified to fill orders immediately. Thus a wholesaler can send only one order-wire instead of sending many wires or making many phone calls.

LCS takes no part in the actual sale of the lumber; it only places the order. Wholesalers and mills who use the service pay a monthly fee. General Manager F. D. Mackie reports 250 wholesalers and 100 western mills have subscribed.

Better acoustics for homes

Sales of acoustical materials rose substantially in 1957. Another jump is expected in 1958.

Lyle Yerges, president of the Acoustical Materials Assn., which represents 90% of the industry, says sales in homes accounted for much of the 1957 gain.

Major technological change last year was a trend toward plastics in sound conditioning materials. Plans for 1958 include designs for larger size ceiling panels with heating, lighting, ventilation and sound conditioning built into a single unit.
**Gas and electric industries start campaigns for home heating-cooling**

This year, each will open a drive to gain a toehold in a field where the other has historically held a strong competitive advantage. The electric industry is aiming at the home heating market (Jan., News). The gas industry is looking for a bigger share of the air-conditioning market. Much more is at stake than heating and cooling.

**Gas cooling to be pushed**

American Gas Assn. is starting its long-talked-of campaign to promote direct-fired, gas-absorption air conditioning in fear that the trend toward combined winter heat-summer cooling systems may eventually cut them out of the residential market unless they can offer a gas system of heating-cooling.

AGA had planned a series of seven symposia in seven cities early this year to start its promotion. The symposiums have been cancelled, however, after Chairman W. W. Selzer found response from utilities and producers so great he figured there was no need for a crew to fully support.

A national advertising program has been scheduled with the hope of selling at least 4,600 gas cooling units in 1958. AGA reports its members have already committed themselves for 6,900 units.

**They point with alarm**

Both gas and electric industries point with alarm to the plans and progress of the other. An electrical trade book, *Electrical World*, recently noted one area of New York where 90% of all new homes are gas heated, commented: "This is an outstanding record . . . but for the electrical industry it means that 90% are lost forever not just for house heating but for water heating and perhaps cooking as well. Is our industry going to sit back year in and year out?"

Warms President J. C. Hamilton of the Arkansas-Louisiana Gas Co.: "Electric utilities already are cutting into our cooking and water-heating business. Through development and sale of the electric heat pump they can take a large share of the summer cooling business and along with it the winter heating business."

The gas industry got some good news in January when Whirlpool Corp. purchased the assets and patents of Servel Inc., assuring at least one make of gas refrigerators to compete with electric models. Servel, long the only manufacturer of gas refrigerators, has quit the appliance business. Its gas air conditioning business was sold last August to the Arkansas-Louisiana Gas Co.

Both the gas and electric utility and appliance industries are talking optimistically of 1958 sales potential. They expect housing starts to bounce back up, point to substantial reductions in their unsold inventory.

Producers in both groups suffered worse sales than expected last year. Gas Appliance Manufacturers Assn. reports sale of 7.7 million gas units (including heating equipment) —10.9% below 1956. Natl. Electrical Manufacturers Assn. reports sales of 8.9 million electrical appliances (seven types)—down 10% from 1956.

**Expect built-ins to pace sales**

Gas appliance producers expect a 2% gain in unit sales this year. They predict recent FHA moves will spur housing and believe expansion of natural gas lines and better merchandising will help sales.

NEMA believes built-ins will pace 1958 electric appliance sales, points out that sales of built-in electric ranges were up 10.4% (to 425,000) in 1957 with a 12% gain predicted for 1958. Sales of other appliances fell last year. The record: refrigerators, —9.5%; water heaters, —8.1%; dishwashers, —2.5%; free standing ranges, —21.7%; dehumidifiers, —18.2%; food waste disposers, —9.8%; freezers, —5.1%.

Price outlook is not good for builders: an uptrend has already started. Both Generac Electric and Kelvinator have increased prices on their 1958 refrigerator lines. No one looks for any reductions.
Set in a simple extruded aluminum frame, these lustrous panels of Blue Ridge Linex® add new drama and distinction to this living room!

• Here are two new features that will stir up more excitement (and house sales) than you ever thought possible.
  They are made of handsome Blue Ridge Patterned Glass!
  They are designed exclusively for Blue Ridge by famed designer and interior decorator, Paul McCobb!
  They can be built easily, by your regular crew!

Paul McCobb has designed eight different ideas like the two shown. Before you put this magazine aside, tear out the coupon at left, fill it in and mail it. We'll reserve for you a free copy of our brand-new, 20-page, color book that shows you all eight McCobb designs and tells you how to use them. First come, first served.
world-famous designer
Paul McCobb now teams with
Blue Ridge to help you
sell your homes!

In this bedroom, panels of Blue Ridge Patterned Glass, set in an aluminum frame, screen off a dressing area to give two rooms in one!

Patterned Glass
by Blue Ridge

BLUE RIDGE GLASS CORP., Kingsport, Tennessee
SOLD THROUGH LIBBEY-OWENS-FORD DISTRIBUTORS AND DEALERS
“Our men gave UNI-flex the "3rd degree" and we mean a real on-the-job test. Nothing goes into the 77 homes at QUITO PARK without customer appeal, customer acceptance and customer satisfaction. We want to lick service calls. UNI-flex with the proven dependability of UNIQUE Balances give us the kind of equipment we want.”

L to R: M. Stoltenkamp, general superintendent and Jack Fisher of the Fisher-Burke Construction Company, San Jose, California

“Is the public interest served by ignoring the practices of the builders association and the union, practices which if continued without check will drive the home-purchaser out of the market, the home builder out of business and seriously affect the economy of the Midwest and the country as a whole?” the petition asks.

If builders win the right to negotiate, can they cut labor costs? Downs says he doubts it. But he hopes builders and carpenters could work together to improve techniques and make it easier to use new materials.

St. Louis carpenters agree to work below-scale

St. Louis area carpenters have decided some work at $2.85 an hour is better than no work at $3.45. So they have agreed to work for the lower scale on a Capehart military housing project at nearby Fort Leonard Wood.

J. W. Bateson, a Dallas general contractor, bid on the 1,329 units on the basis of a Dept. of Labor report fixing the prevailing wage for carpenters in that area as $2.25. After Bateson won the contract, St. Louis carpenters announced they would work for the lower scale of $2.85. Bateson and the Army Engineers then found themselves in this predicament: If the Engineers let Bateson add on the extra cost involved in maintaining the higher scale, the per unit price of the project would go over the maximum $16,500 allowed by law. Bateson announced Jan. 7 that "it looks as though I'll have to withdraw my bid." St. Louis carpenters, realizing the job might be delayed for months if rebidding was necessary, sat down with Bateson and agreed to $2.85—a price which should keep the revised bid price below the $16,500 limit. Groaned the carpenters’ business manager after signing the pact: "We have made a great sacrifice."
Look up to TRI-DEK...for dramatic profits!

Tri-Dek's spacious open-beam construction sells well today—and it saves you money. In one operation, your men put up roof deck, insulation, and finished ceiling.

Tongue-and-groove on all four sides, Tri-Dek is a solid base for built-up roofing. All-around self-sealing joint with vapor barrier optional in the 2" and 3" thicknesses. Also available in 1 1/2" thickness without vapor seal for use in mild climates. Tri-Dek's 2' x 8' slabs have strength and rigidity built in by Gold Bond's exclusive Fiberlok process.

Tri-Dek will save you time and material—Tri-Dek will help you sell. For all the facts, call your Gold Bond® representative or write Dept. HH-28, National Gypsum Company, Buffalo 2, New York.

Gold Bond
BUILDING PRODUCTS
NATIONAL GYPSUM COMPANY

FEBRUARY 1958
When they ask to see the Furnace...

...SHOW THEM THE ONE THAT’S

Show them SUN VALLEY All-Year
AN AIR-CONDITIONER TOO!

Gas Air-Conditioning by ARKLA-SERVEL!

Cools the entire home in Summer from a single compact Gas unit. (Heats in Winter, too!)

SHOW THEM the most effective way to beat any heat spell. No more drafty fans . . . no more spot cooling in a couple of rooms. The Sun Valley* by Arkla-Servel cools the entire house (every room of it) from a single compact unit. And your prospects will like the peace and quiet of the Sun Valley*, too! There's no noise because there are no moving parts in the cooling system.

SHOW THEM how easily the air conditioner can be turned into a furnace when blustery winter comes booming in. A simple dial setting—and presto!—the Sun Valley* by Arkla-Servel is the most wonderful furnace! It circulates gentle warm air to every room of the house. And with Gas your prospects will never have to worry about late fuel deliveries—dependable Gas is piped right into their homes.

SHOW THEM how a single and simple thermostat looks after them night and day—with complete and correct moisture control both winter and summer. They merely set the thermostat to a desired temperature, and the Sun Valley* maintains that degree of heat or cooling around the clock. They're safe from all kinds of weather . . . and further protected by Arkla-Servel's five year warranty, too. AMERICAN GAS ASSOCIATION.

ONLY GAS does so much more... for so much less!
HOUSING MARKET:

Federal moves to boost building will only help a little, industry says

Recession psychology continues to dampen the new house sales market more than easing money can stimulate it. "I don't think we'll build any more houses in 1958 than we did in 1957," predicts Analyst James Downs of Chicago. "It can be plus or minus 5%, but a 5% drop seems more likely than a 5% gain. Buyer attitude will shrink more than the supply of mortgage money expands. I don't expect the government to do anything effective to help housing until well into the third quarter. By then they may learn it takes more than an unbalanced budget and a big missile program to stimulate the economy."

More optimism comes from other sources. The US Savings & Loan League, for instance, prophesies home building will get off to a slow start and pick up momentum in the second half of the year, as it did last year.

Builders and lenders agree the government's moves to give housing a shot in the arm will only help around the fringes. FHA now lets closing costs be included in its mortgages again. The cash-payment requirement was imposed in April 1955 as an anti-inflation measure. But its removal means little, except on the handful of $10,000 to $12,000 homes. Reason: the maximum mortgage FHA will insure on a house of a specified valuation remains the same. So the minimum cash down requirement remains the same. Only if a buyer pays more than the minimum down payment (or if the builder pays closing costs himself) does the new rule mean a cash saving to the buyer.

Example: a builder gets a $16,000 valuation of a house, with a $14,800 allowable FHA-insured mortgage. The builder sells for $16,000. The maximum mortgage is still $14,800. So no closing costs can be added to it.

Closing costs, moreover, may not include deposits for taxes, assessments and hazard insurance. In three cases only, discounts can be included in closing costs: 1) refinancing loans other than those made in connection with sale of the mortgaged property within the preceding six months, 2) loans to builders who are closing in their own names, 3) owner of an individual lot who builds for his own occupancy.

Vice President Harold R. Berlin of Johns-Manville foresees a 3.5% gain for housing dollar volume this year, to $12.4 billions. He predicts 1 million starts.

But typical of the new consensus is this comment by a New England lender: "Housing may help hold the economy, but it will not lead it or pull it up as some people have been predicting."

Year-end housing statistics for 1957 point up important new trends.

- Apartment house construction continues to make a major comeback (Aug. News). As land grows scarcer within easy commuting distance of central cities, there should be more and more of it. (Even sprawling Los Angeles feels pinched for raw land.) Nonfarm building permits—as compiled for 10 months of 1957 by BLS—show all of the drop in housing was concentrated in one-family units! They were off 18.7% from 1956. On the other hand, permits for two-family structures were up 2.6%, permits for three- and four-family dwellings were up 24.2% and permits for five- or more family apartments were up 52.9%. In all, multi-family structures should account for 100,000 of 1957's

- Measured by starts, last year was the lowest housing year since 1949. Starts slumped 7% from 1956. But the rate of decline was less than half of the drop between 1955 and 1956. Private starts were on the rise at year end. Seasonally adjusted starts averaged 964,000 for the first half, 1,011,000 during the second half.

- Conventional financing was 9% from its 1956 level—which casts some doubt on the widely held assumption that conventional mortgage financing will almost always produce the same amount of starts.

- Last year, conventional financing accounted for a whopping 70% of all private starts—a 12% gain from 1956.

- Regionally, the South was last year's boom area. It showed a rise in private starts while all other regions slipped. This trend should continue, in the wake of industrialization plus the fabulous Florida boom.

- Conventional financing was 9% lower than in 1956. This year's 7% drop means more likely than a 5% gain. Buyer attitude will shrink more than the supply of mortgage money expands. I don't expect the government to do anything effective to help housing until well into the third quarter. By then they may learn it takes more than an unbalanced budget and a big missile program to stimulate the economy."

Money-back guarantees to spur sales of new homes are catching on in a modest way. Most of them expose the builder to only small financial risk because buyers have to

![Market Briefs](chart)

**FHA APPLICATIONS**: on new homes dropped 7.6% to 13,580 in December. The drop was more than seasonal and the total was 75% higher than December 1956. This brought FHA applications for 1957 to 198,769—0.6% over 1956. Applications on multi-family units went up 60% to 3,061 due to 1,552 Capehart military housing units. All project units for 1957 totaled 67,379, a 125% gain over 1956. But with Capehart units left out, the real gain was only about 10%.

VA appraisal requests for proposed units continued to vanish. They reached only 3,501 in December—off 6.6% from November. For the year there were 159,399 appraisal requests, a drop of 60% from 1956.

![Housing Starts](chart)

**HOUSING STARTS** slipped from 75,500 in November to 62,000 in December. For the year, starts totaled 1,059,000—7.1% behind 1956 and lowest since 1949. December private starts sank to 60,800 for a seasonally adjusted annual rate of 970,000, lowest since the 962,000 of last April. Private starts for 1957, according to BLS, were 989,000—3.5% behind 1956 and the lowest since 1949.

With 1,200 starts in December, public starts totaled 49,500 (including Capehart military housing) for 1957, up more than 100% from 1956.
Mason fires a chief underwriter as FHA tries to clean up backlog

FHA is going to do something about its processing mess, even if it means tossing out some well-entrenched career employees.

Commissioner Norman Mason has made it clear he is fed-up with bungling in some field offices. Last month he fired James Salvant, chief underwriter in the New Orleans field office, on charges of inefficiency. There has been an 8-to-10 week backlog in the office. FHA is also seeking a $2 million deficiency appropriation to hire new staff for field offices and it wants a $3 million increase in its 1959 budget, now before Congress. Says one FHA official: "If we don't get the money, we'll be swamped and we won't be able to cope with it."

The Voluntary Home Mortgage Credit Program committee voiced a similar feeling in stronger language in January, passed a resolution urging FHA to simplify its procedures so it can handle more business. Says one member of the committee: "It's almost a scandalous situation. It will have a real influence on housing in 1958. The major hope for an increase in starts has to be FHA because conventionally financed starts can't go up much."

The consensus: unless processing is speeded up FHA will be a brake on housing this year.

FHA supervisors, agency officials said, have filed complaints about Salvant for six years. But what really triggered his ouster was a telegram sent Mason in November by eight FHA field offices. Last month he fired James Salvant. Salvant's appeal was denied by Mason.

The New Orleans FHA office reported applications in 1957 of 6,117 compared to 4,315 in 1956. In 1957 the office issued 5,435 commitments compared to 4,358 in 1956.

80.7% of all '50-'56 housing starts were in met areas, economist claims

What proportion of America's houses are being built in the metropolitan areas—where all the nation's population growth is taking place?

The Bureau of Labor Statistics estimates that from 1950 through 1956 72.2% of all new housing starts were in 168 standard metropolitan areas. The Census Bureau, in its new housing inventory (Jan., News), estimates it was only 64.8%

(BLS and Census also disagree on the number of units started—Census reporting 2 million more in 1957 than 1956. The 6% year period, a difference which remains to be explained.)

Dr. Reinhold Wolff, director of the University of Miami's Bureau of Business and Economic Research and a knowledgeable housing economist, says both estimates are proportionate. His estimate: 80.7% of all 1950-56 starts were in metropolitan areas. Says he: it is unbelievable, on the face of it, that 35.2 or even 27.8% of all nonfarm, nonresort housing starts could have taken place in nonmetropolitan areas which, on balance, had no population increase.

Part of the disparity is explainable because both BLS and Census still use the 168 standard metropolitan areas designated in 1950 to preserve the basis of comparison. Since 1950 there have been major additions—all growth areas—to seven metropolitan areas and six new met areas have been designated.  

of the 10 members of the Louisiana congressional delegation. The telegram was written after the congressmen heard bitter complaints from New Orleans builders, realtors and mortgage men. Its text has not been disclosed but it reportedly called the processing delays disgraceful and demanded action.

Mason sent investigators from his own office, sent underwriters from the San Antonio office to whittle down the backlog. Salvant's dismissal followed. In July 2, FHA Director Ralph H. Agate announced the backlog had been wiped out.

There will apparently be no further dismissals in the New Orleans office, though some Louisiana congressmen expressed surprise that Agate was not included in the shake-up. They indicated they still believe Salvant, who has been the fall guy for others in the office.

Salvant, 42, can appeal under civil service regulations and apparently will. He had been with FHA seven years.

One project caught in the backlog last fall was William Zeckendorf's big community project at Laplace. The Quinns Construction Co., which has been building homes for Zeckendorf, appealed for help to US Rep. Edward Hebert (D., La.) after waiting several weeks for commitments. "The work is sitting there, Hebert interceded with Salvant, who got the commitments out promptly.

Morgan Earnest, president of the Home Builders Assn. of Greater New Orleans reports no complaints of delays since Agate told him the backlog had been cleared up. "It was not our intention to hurt anybody in FHA," Earnest says. "Our single interest has been to do anything to help reduce the backlog and get on a current basis."

Wolff also includes in his estimate the starts of several fringe areas which he considers part of metropolitan areas though not yet so designated by the government. One example: Broward County, Fla., just north of Miami and center of much home building for the last 10 years (12,147 starts in 1957), much of it spillover from the Miami area. In the government's eyes, all Broward county starts are still non-metropolitan.

But Wolff notes still other fast-growth fringe areas around existing metropolitan areas which are not included in his estimate.

James Downes, chairman of the Real Estate Research Corp. in Chicago believes there is much home building on the periphery of existing metropolitan areas counted as nonmet starts by BLS and Census. He also cited the relative difficulty in counting starts in some met areas. "In an area like Pittsburgh, we have found we couldn't tell where the houses had been built or how many unless we got in a car and went out and looked for them," he says.

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Additions were made to the met areas of San Bernardino, Calif.; Shreveport, Ark.; Milwaukwe, Wis.; Lowell, Mass.; Atlanta, Ga.; Evansville, Ind. and Norfolk-Portsmouth, Va. New met areas designated since 1950: Duluth, Minn.; Hampton-Newport News-Warwick, Va.; Fort Smith, Ark.; Tucson, Ariz.; Santa Barbara, Calif. and West Palm Beach, Fla.

absorb closing costs, mortgage transfer fees and interest on their loans.

Builder Frank Rogers of Omaha, for instance, likes results he is getting from his offer to repurchase a house from any buyer who is forced by circumstances beyond his control to move out of town within 12 months after the original purchase. Rogers sprang the scheme during the Christmas-New Year's sale season with a slow sales time. Result: Six sales (Roger's builds 1,000 to 1,400 sq. ft. homes priced from $13,950 to $21,000). If a buyer has to leave, Rogers will pay him back the down payment ($150 on his $13,950 model) plus mortgage principal.

On a $12,800, FHA 25-year loan, this would be only $250 the first year. The customer must pay for painting or other work to re­ store the house to top condition. He forfeits closing costs, taxes, interest charges, and pays mortgage transfer fees. Says Rogers: "I think I saw the idea in Home & Home."

In Mahopac, N. Y., Builder James Licata offers buyers a two-year-money-back deal. Buyers get back equity (down payment plus principal) less their rent over a month rent. Buyers pay for needed fix-up work.

At Hastings-on-the-Hudson, N. Y., 18-mi. upriver from New York, Raydon Construction Co. gives an unconditional refund promise on its $36,000 ($4,500 up) home available only at the end of a year. Buyers can recup­ erate their down payment, less $600 for a new paint job, transfer costs not to exceed $100 and repairs and closing costs.

Explain partners Sol A. Klinger and Larry Boyland: "The way home prices have been going, people can sell in the open market for more than we would have to give back."

Promoting prefabs

Prefabbers have gone on US and Canadian newstands with 100,000 copies of a 50+ home plan book.

The 172-page book called Housing Annual 1958, shows one model by each of 46 mem­ bers of Prefabricated Home Manufacturers Institute—one to a page. The sales pitch hammers the theme that "the public can no longer tell a factory-made house from a con­ ventionally built one." Engineers, the annual contends, are prefabbings' best cus­ tomers because "they readily appreciate the superior features of a factory-made house."

Selling the executive market

A really firm in New York's expanding exurbs has been formed to specialize in catering to the transferred executive. Executive Housing Inc. (1073 Post Road, Darien, Conn.) offers the sort of service any realtor should provide—cleverly packaged for snob appeal. Advice is given on neighborhoods, schools, commuting, zoning laws, selected properties—from $150,000 up. "There is no time to waste—cannot af­ ford to pick the wrong town, neighborhoods or home," says the firm's brochure. "We see that you don't." Buyers pay the standard commission.

The idea is the brainchild of Charles P. Pelham, retired senior vice president of Ful­ ler, Smith & Ross, New York ad agency. Says Pelham: "We don't go on selling real estate the way you did 100 years ago." His partners are Realtors Mathew Gardner and Arthur Wheeler (who also maintain their regular real estate business).

It is still too soon to say whether the plan is a hit. But Gardner, Wheeler and Pelham hope to tie-up with other realtors to offer a nationwide referral service.

FEBRUARY 1958
Chrysler Airtemp

HEATING and COOLING

for any house anywhere

No matter what type of house you're building, or where—you'll find Airtemp has equipment that exactly fits. The Airtemp line is complete—with 297 models. A "just-right" Airtemp furnace or air conditioner means faster, easier installation—no delays!

As a builder you also benefit from:

- Chrysler's trouble-free engineering that cuts after-sale complaints.
- the sales appeal and prestige of the Chrysler name.
- nation-wide distribution and prompt servicing.
- pre-tested merchandising aids to help you sell your houses.

FOR ALL THE FACTS, WRITE AIRTEMP DIVISION, CHRYSLER CORP., DAYTON 1, OHIO.
LOCAL MARKETS: builders fight realtor ban on ‘open houses’

Realtors in a scattering of California cities are trying to stop selling through model homes.

More local realty boards are considering—a and a few have adopted—a ban on Sunday selling.

The developments worry builders. Model homes are their best showcase. And Sunday, they say, is just about their best sales day. An intra-industry fight, which could become widespread, seems to be starting.

Only a small cloud?

Sharpest squabble so far is in Downey (pop. 51,950), a Los Angeles satellite town. The real estate board there has outlawed sales via open houses or model homes among its members. The ban extends to signs, flags, people sitting in autos in front of for-sale homes. Originally, most realtors favored banning open houses on occupied property. Brokers said these hurt their business because everybody on the same street who wants to sell a house puts out his own sign, by-passing the realtor but drawing traffic from his advertising.

Back in Downey, its members handling builder says, its officials say, they agreed builders would go along if open houses were eliminated completely.

Board President James F. Hall adds that the ban was imposed to increase professionalism in real estate by eliminating part-time salesmen at open houses who often lack real sales talent. Now, Downey realtors advertise directors customers only to their offices, where, says Hall, a buyer’s credit standing can be screened first to save him frustration of looking at homes he can’t possibly afford.

Downey realtors are also trying to stop builders from having model houses and will cooperate on no promotions. Instead, realtors offer mandatory multiple listing on all homes for sale, new or used. Hall argues that this brings builders more prospects than open houses, anyway.

Little vacant land is left in the Downey area. So new homes there are generally built in groups of two and three by small-volume builders. But one builder, who had been working with a utility company on a promotion for 12 homes, had to drop the project when the utility backed out in the face of the open house ban.

“We don’t want any restrictions that curb our rights,” says one Downey builder. But he adds: “So much pressure was put on me that I had to go along [with the ban].”

What worries southern California builders most is whether the idea will spread to suburbs still booming with mass building.

Developments elsewhere

In nearby Fullerton (pop. 46,500), the realty board has banned open houses on Sunday. Board President W. Rex Connelly admits: “Builders are violently against it. They think Sunday’s a good day.” Some brokers are unhappy about it, too, but it’s mostly the younger ones who think you can get rich on Sunday.” Most realtors do not. Connelly adds. “Leads are really very poor on Sunday,” he says. “You just get a lot of lookers.”

Connelly reports he and other Fullerton realtors’ ban will be selling for small-volume builders, but “we’ve been losing them fast with our Sunday closure rule.” Most builders are hiring their own salesmen.

Realty boards in Anaheim and La Habra are also considering a Sunday closing rule, says Connelly, as are other boards all over California. Both Anaheim and La Habra have many large tract developments.

Walker & Lee of Long Beach, who sell more houses for more builders than any other US realtor, are keeping their model homes in Fullerton open Sundays. They are not members of the Fullerton board. But Sales Manager Frank Hart reports builders are finding they need the services of realtors to peddle their houses in today’s tougher market. “I think 1958 will see more houses sold at regular commissions (5%) than ever before,” predicts Hart.

Detroit: A ban on Sunday real estate selling is also under consideration in Detroit. The city council has already once approved an ordinance to ban selling and showing of homes on Sunday, but reversed a week later to allow time for further study after home builders and some realtors protested. (Similar proposals were defeated in 1939 and 1945.)

Actually, a Sunday selling ban in Detroit would not hurt home builders much. There is only one tract in the city itself. But the Builders Assn. of Metropolitan Detroit favors the ban encourages suburban communities to do likewise.

One reason brokers want a ban: they believe it would drive part-time, week-end salesmen out of the business (though home builders contend they use very few part-time salesmen).

Detroit builders think public opinion may swing the final vote in their favor. They point to a recent Cincinnati study which showed that “46% of the public prefer to visit model homes on Sunday. “We think the same thing applies here,” says Lockwood.

Mail order lot sales reappear in new Florida land boom

That big Florida land boom is beginning to have some of the dizzy aspects of the ill-fated speck of the 20’s.

Two years ago, FORTUNE took a look at the Sunshine State’s land boom, concluded that it resembled the boom of the 20’s only in the spectacular rise in land prices. FORTUNE: “Developers do not advertise extravagantly in distant newspapers. . . . Trades are largely cash; the loosest terms available are one-third down, the balance in three equal payments in the next three years instead of 5 to 10% down, the rest in 10 years or longer as in the days of the bubble.”

Today, things are changing. Many Florida land developments are advertised in “distant newspapers” and many of them ask only 10% down with long payment terms.

Some of these land promotions are solid. The buyer is assured of some improvements—at least streets—in his subdivision. But other promoters give the buyer nothing but the land, without access. Gov. LeRoy Collins of Florida complains of one subdivision located 10 mi. from any road that was not governmentally subsidized at all. He laments: “It is distressing to know there are some instances which are reminiscent of the boom of the 20’s. . . . ”

Florida has only a loosely enforced law on out-of-state advertising of Florida land. It can do nothing to enforce subdivision standards in unincorporated areas.

Most mail-order subdivisions are in central Florida where land is still comparatively cheap ($500 an acre or less). There are none around Miami, where prices start at $5,000 an acre for salesmen.

The Miami Herald, whose ace Reporter Steve Trumbull spends most of his time investigating real estate promotions, angrily reports that one “handful of fast-buck, dollar-hungry promoters” are selling hydraulically filled homesites on the upper Florida keys where there is no subdivision control. Pointing to poor fill and poorer construction practices, the Herald warns: “They are inviting a future hurricane disaster that could rival Galveston.”

If many Florida land promotions border on fraud, some make every effort to maintain a reputation for scrupulous honesty, realizing there is a big profit in land even if the customer gets all he was promised.

One example: The Mackle Co., Florida’s biggest home building firm, is developing 80,000 acres on the Gulf Coast with Canadian financing. The company is spending $2 million promoting its development—Port Charlotte, south of Sarasota. Mackle is selling both land ($10 down and $10 a month for a $795 lot) and houses (10 models priced from $6,960 to $15,950 with FHA terms.)

Detroit Builder Ira Hochkins and Detroit Mortgage Banker Jay Kislak of Miami are selling parcels out of a 20,000 acre tract they bought two years ago in the vicinity of the Cape Canaveral missile testing center. Raw land in this area, now one of the hottest land and housing markets in Florida, has gone up from $80 to $500 an acre in the last two years.

The land boom is still expanding. One sounding one in the Miami area (the only real suburban part of Florida, based on average year-round temperature and other factors, in which one man still holds the key to future development there: Arthur Vincent Davis, 90, founder and retired board chairman of the Aluminum Company of America. He owns: 20% of the best land at Dade County (Miami) and 28,000 acres in adjoining Broward County.

News continued on p. 63
“American LUSTRAGRAY glare reducing glass has home owner appeal by providing maximum viewing pleasure from the interior and greater privacy from the exterior”

— says Charles C. Richardson, general contractor, San Diego, Calif. His large home, shown here, was designed by Domingo Martinez.

As Contractor Richardson can tell you, this neutral gray-tint sheet glass makes homes more salable because it:

• Reduces sun glare 50%, minimizing eyestrain and fatigue
• Reduces heat transmission
• Provides exterior privacy and interior “clear glass” vision
• Makes permanently attractive appearance
• Is economical

AMERICAN LUSTRAGRAY is available through more than 500 glass jobbers. See classified phone book.

Thicknesses: 5/16", 3/8", 1/4". Maximum size: 6' x 10'.

Photos from interior. Open space between sliding glass doors shows sun glare. LUSTRAGRAY glazing reduces sun glare, sharpens view.

Photo from exterior indicates LUSTRAGRAY glazing throughout, including sidelites. Residence covers 4,000 sq. ft.
PEOPLE:

George P. Bickford, Cleveland attorney, succeeds Pierce Gerety as FHA general counsel

Pierce J. Gerety has resigned as FHA general counsel after only nine months in office. His successor is George P. Bickford, 56, a Cleveland tax and corporation lawyer.

Gerety, a wide-ranging young (43) lawyer, was to leave the government about Feb. 1 to return to private practice in New York City and his native Connecticut. In his short stay with FHA, he became FHA's No. 2 maker of public appearances (after Commissioner Norman P. Mason himself), won friends for the agency throughout the housing industry by his graceful decisiveness.

His return to private life was not unexpected. Gerety had planned to leave government when he wound up a two-year job expected. Gerety had planned to leave government about Feb. 1 to return to private practice in New York City and his native Connecticut. In his short stay with FHA, he became FHA's No. 2 maker of public appearances (after Commissioner Norman P. Mason himself), won friends for the agency throughout the housing industry by his graceful decisiveness.

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as part-time president of Mortgage Guaranty Insurance Co., Milwaukee (Dec. ’57, News) to merge his Hiller Co. into William W. Bun- ge’s Mortgage Associates, thus creating Wis­consin’s largest mortgage loan correspondent firm; Edward L. Stanley, manager of mort­gage loans and real estate for Provident Mu­tual Life Insurance Co. of Philadelphia, was pro­moted to vice president; J. Harris Laner was elected president of the Philadelphia Mortgage Bankers Assn., succeeding Joseph J. Braceland.

OFFICIALS: Conrad F. Becker, a banker and former state treasurer, was named di­rector of Illinois’ new department of financial institutions, which, on July 1 will take control over the Illinois state bank. Edward Grubb, 41, was named FHA director at Jacksonville, Ill.; Leland C. McCallum, former asst. deputy commissioner of FHA in Washing­ton (where he was a key figure in Title I repair loans for 15 years), became vice president of Insured Credit Services Inc., Chicago, which offers repair loan insurance at half FHA’s rate (Oct. ’56, News).

Long Island builders election voided by New York court

Election of three insurgent builders to head the Long Island Home Builders Institute in 1958 has been voided by a New York court.

Justice Howard T. Hogan ruled that there was “inadvertent discrimination” when notice of the annual election was mailed: some delinquent members (who had not paid dues) received notices while other delinquent members did not.

While the case was in court, the judge had enjoined the upset slate from taking office. Now, the second largest NAHB chapter is in the hands of a caretaker committee headed by Past President Leonard L. Frank until a new election is held this month.

Deposed president-elect is Charles Mascioli, candidate of a group of Big Long Island home builders who oppose the entrenched leadership of the Institute. A year ago they organized their own association but also stayed in the LIHBI. In the Nov. 20 election Mascioli defeated the regular nominee Daniel B. Grady, 38 to 25. (About 360 builders were eligible to vote.

Robert S. Hunt, the LIHBI’s executive secretary, resigned after the upset but agreed to stay after the court enjoined Mascioli from taking office.

LA housing authority fires 2 who testified against director

Two veteran employees of the Los Angeles Public Housing Authority have been fired as a result of testimony they gave to a grand jury about their boss, Executive Director Howard L. Holtzendorff.

The testimony resulted in a 52-count in­dictment against Holtzendorff charging misuse of public funds and falsifying records. (Jan., News).

The five-man housing authority voted unani­mously to fire these two $14,750-a-year men, James O. McConnell, comptroller for 14 years, and Roy L. Patterson, director of management for 11 years. The authority charges that they had lied when they testified to the grand jury.

The accusation is based on affidavits they signed April which tended to clear Holtzendorff of any wrongdoing in trying to help Mayor Fletcher Bowron’s unsuccessful campaign for re-election in 1953. Holtzendorff’s indictment is based on accusations that he used housing authority employees to help address campaign literature backing Bowron; paid them with public funds.

McConnell and Patterson claim that the testimony they gave the grand jury is true. They say they signed the affidavits supporting Holtzendorff during a Public Housing Admin­istration investigation of his office because they felt it would be insubordinate not to.

MANUFACTURERS: Ray J. Dervey stepped up from executive vice president to presi­dent of Waterman-Waterbury Co., Minne­apolis, makers of warm-air equipment, succeeding David Sedwick, who resigned; Gilbert W. Chapman, president of Yale and Towne Mfg. Co., has been elected president of the New York public library.

A. W. Pipenhagen promoted to presidency of Stylecraft

Stylecraft Homes Inc., 11-month-old Des Plaines, Ill. prefab firm which is starting to expand, beefed up its executive ranks by ap­pointing Arthur W. Pipenhagen, 39, from execu­tive vice president to president. President E. A. Herzog, builder of some 3,000 homes in the Chicago area since 1947, became board chairman. Pipenhagen, a legal and finance expert, joined Herzog in 1955 after resigning as vice president and general manager of Harnischfeger Homes Acceptance Corp. Joseph L. Fessler succeeds Pipenhagen as treas­urer. Stylecraft sells in 12 midwest states.

BUILDERS: NAHB locals and state chap­ters picked these new presidents: Omaha.

Lloyd A. Thornton: Chicagoland Young Builders Council, John T. Nagle; San Diego; Hal W. Rand; northern Kentucky, Charles Johnson; Memphis, Jack Renshaw; Michi­gan, John Vandenberg of Grand Rapids; Detroit, Joseph L. Curran; Palm Beach Co., Robert C. Brown; South Florida, David B. Fleeman; Wisconsin, Rod Brunton of Beloit; Houston, Robert W. Clemens.


House of the century gets a reprieve from demolition

One of Architect Frank Lloyd Wright’s earliest (1906) and most famous buildings, the Robie House in Chicago, has been saved from threatened demolition by Real Estate Tycoon William Zeckendorf.

His Webb and Knapp Inc. will buy the house for $125,000 from the Chicago Theolo­gical Seminary, a university affiliate, use it as an office during the $20 million Hyde Park urban renewal project (H&H, Oct. ’57). The house will then be turned over to the National Trust, a quasi-public organization in Wash­ington which brings together several colonial homes, as an architectural library and mu­seum.

The Robie House was called the “house of the century” in House & Home’s “100 Years of the American House” review pro­duced in honor of the AIA centennial last May (H&H, May ’57). “No house built in America during the past hundred years matches its importance. . . Without it, much of modern architecture as we know it today might not exist,” said House & Home.

The seminary shamefacedly announced the landmark would have to go more than a year ago. Pinched for space, it needed the land for a new dormitory for married students. But it expressed willingness to spare the house if it could find an alternate site. No solution turned up, and demolition was set to start last September.

Then the Commission of Chicago Architec­tural Landmarks set up a “Save the Robie House” committee, headed by Architect Wil­liam Hartmann. He pleaded: “This is his­torically the most important piece of Amer­ican architecture.” Cried Wright: “It would be like destroying a great work of art.”

The problem was money. The seminary delayed demolition “more on faith than any prospect of solution.” Zeckendorf’s offer has taken a load from its shoulders. Sighed a seminary business manager: “It’s been a mur­derous thing. We’re losing students and all we get is abuse.”

The cucihcion story is continued on p. 67,
YOU CAN BUILD THE **Mark 58** "HOUSE OF THE YEAR"... AND PARTICIPATE IN THE GREATEST PROGRAM IN BUILDING HISTORY

**This is the Mark 58:**
The Mark 58, House Beautiful Magazine's selection as "House of the Year", is the joint effort of 30 of the nation's foremost manufacturers to demonstrate the results of years of research and development in products being introduced for the first time to the American public in 1958.

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The Mark 58 "House of the Year" is available to builders everywhere, not just Scholz dealers.

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Decide now to share in the interest—the traffic—the profits—this great program assures you in your community. Phone or write today.

America's most exciting homes... the quality... the design... sells itself.

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Difference / Home Buyers do!

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individual builder

Yes, Hotpoint will write, prepare, and deliver merchandising materials for qualified builders—the materials needed to sell homes quickly and profitably.

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- Site signs
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- Newspaper ads
- Press releases
- TV and radio scripts
- Point-of-purchase signs
- Talking House promotions
- Site signs
- TV and radio scripts
- Point-of-purchase signs
- Talking House promotions
- Sound-slide films that pre-sell prospects

In addition, our staff will help plan kitchens that qualify builders for Honor Home Certificates and Planned Kitchen Citations.

Hotpoint offers these services for one good reason—we want builder business. We know the way to get it is to earn it—by helping to sell your homes—with fine appliances and with powerful merchandising support. For complete details, contact your Hotpoint Distributor's Builder Specialist today.

**LOOK FOR THAT**

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How convertible rooms
let you offer more house
for less money

One room doubles as a family room or a dining room. Built-in cabinets with sliding doors and an extension table are all that's needed for the change-over. The floor of Armstrong Parquet Linoleum Tile is an excellent choice because it's rugged for the family room . . . elegant for the dining room . . . practical for both. And it won't be stained by spilled things.
Two rooms in one—a den by day, a guest room at night when a double bed pulls out of the wall. The floor is Armstrong Corkstyle* Excelon Tile—with inset strips. It has all the expensive charm of cork that people like in dens, yet it's low in cost. Armstrong floors are highly resistant to marring, an essential for convertible rooms where furniture is moved about.

Prospects always want more rooms than a builder can give them for the money. But convertible rooms can help solve the problem. You simply add to the number of room facilities the buyer gets without adding to the number of rooms you build. Make a den or family room double as a guest room, for example, and you give your homes an added feature that will increase their sales appeal.

Sometimes simple built-ins increase a room's versatility. Sometimes nothing more is needed than one or two pieces of convertible furniture in your model home to show the dual purpose of a room.

Usually, the most dramatic way to demonstrate such a room is to convert it while your prospects watch. If this is not practical, furnish the room one way and show a photograph of it in its other form. This is often sufficient proof of its two uses—and provides the selling extra needed to make the sale.

Armstrong floors are well suited to the requirements of convertible rooms. They add color to the room's decoration, and they're not easily marred by frequent furniture changes. Easy to clean, these floors also reduce the time required to change the room for its next use.

Just which Armstrong floor you choose will depend on your particular requirements. But Armstrong makes all kinds of resilient floors, so you can be sure of getting one that exactly fits the needs of your convertible rooms.

Armstrong Architectural-Builder Consultants are at your service to help you choose suitable flooring materials. They can give you merchandising and sales aids and can call on the Armstrong Bureau of Interior Decoration to assist you or your color consultant. They can also tell you how you can qualify for Armstrong's model house floor policy. Contact your nearest Armstrong District Office. Or write direct to Armstrong Cork Company, Floor Division, 1602 Sixth Street, Lancaster, Pennsylvania.

Convertible rooms . . .

A practical merchandising idea from Armstrong Architectural-Builder Service to help you sell homes faster, more profitably.

Armstrong
THE MODERN FASHION IN FLOORSTINLLEUM • INLAID VINYL CORLON® • EXCELON® VINYL-ASBESTOS TILE CUSTOM CORLON PLASTIC TILE • RUBBER TILE • CORLON TILE CUSTOM VINYL CORLON TILE • ASPHALT TILE • LINOTILE®
FORD TRUCKS

...and the new

'58 FORD TILT CAB—Lowest tilt cab prices in America by hundreds of dollars . . . based on a comparison of factory-suggested list prices! Medium Duties from 18,000-lb. GVW to 32,000-lb. GCW. Other models up to 65,000-lb. GCW.

'58 FORD STYLESIDE PICKUP. Modern, extra-wide body is standard at no extra cost. 6½-, 8-, and 9-ft. bodies. Conventional Flareside box available. Six or V-8 engines.

FORD PARCEL DELIVERY CHASSIS (P-350 shown) are available in windshield-front-end or stripped-chassis models for your choice of modern custom-built bodies. Four P-Series chassis with GVW's up to 17,000 lb. for bodies with 250- to 525-cu. ft. capacities.

FORD F-100 CUSTOM PANEL features roomy, all-steel, fully lined body. A big 158 cubic feet of loadspace and wide rear door opening easily accommodates bulky articles. Its 110-inch wheelbase makes it highly maneuverable in traffic.
COST LESS
'58s prove it

A Ford truck is designed to cost you less from the day you buy it to the day you turn it in! Ford leads with the features that mean dollar savings.

There's first cost. Many Ford trucks are priced substantially below competitive models—frequently hundreds of dollars less! And resale value is traditionally high. There's engine economy. Only Ford offers Short Stroke power in both Six and V-8. There's reliability. These new '58s are built to last. Independent insurance experts prove Ford trucks last longer. They're money-savers to the end . . . see your Ford Dealer.

FORD MEDIUM DUTY TRUCKS (F-600 shown) available with 9- or 12-ft. stake bodies, offer wide choice of modern Short Stroke power, V-8 or Six, 1½- or 2-ton models with GVWs from 15,000 to 19,500 pounds. Fully automatic Transmatic transmission available.
WESTINGHOUSE
PUSH-BUTTON LAUNDRY
IN 25 INCHES WITH THE
SHAPE OF TOMORROW
FOR THE HOMES YOU’RE BUILDING TODAY!

Just 25 inches wide and 24 inches deep—that’s all the floor space you’ll need to install Westinghouse SPACE-MATES vertically in a kitchen, in a closet, an alcove, even a bathroom. Never again need space considerations rule out a complete home laundry as an extra selling feature!
The new 1958 Deluxe SPACE-MATES will give you plenty to talk about to your prospects. For these are automatic twins with push-button control centers on each unit—for selection of washing and rinsing temperatures, type of fabric, drying temperatures and other settings. Of course the Laundromat has the famous Westinghouse revolving Agitator Action... proved the best way to get a full family-size load really clean.
Like all the new Westinghouse appliances, these SPACE-MATES have the clean, modern design we call the SHAPE OF TOMORROW. Your prospects have been seeing this custom Westinghouse look in magazines and on television. They’ll be delighted to see it in your homes. SPACE-MATES are available in five Confection Colors.
Right now, call your Westinghouse Distributor or write to the Westinghouse Electric Corp., Contract Sales Dept., Major Appliance Division, Mansfield, Ohio.

HERE’S HOW THE SPACE-MATES can be fitted under a counter—just 30½" clearance in width, 24" in depth, 34½ in height. Pictured are standard SPACE-MATES with the same space-saving installation possibilities as the Deluxe SPACE-MATES shown at left.

THE DELUXE, free-standing Westinghouse Laundry Twins have the SHAPE OF TOMORROW... the clean modern design that adds buy appeal wherever your prospects see it. Westinghouse appliances in your home will mark you as a top-quality builder.

WESTINGHOUSE WASH ‘N DRY LAUNDROMAT does the whole laundry job in one unit. It washes and dries—all in one space-saving unit only 32 inches wide. And it has flexible controls, completely automatic in operation. Also available in Confection Colors.

YOU CAN BE SURE... IF IT’S Westinghouse
Letters

196x in 1958

I AM CLAIMING SOME CREDIT FOR URGING YOU TO PRODUCE 196X STORY WHOLE ISSUE IS TERRIFIC WE ARE STUDYING EVERY DETAIL FOR OUR 1958 HOUSE PLEASE SHIP EIGHT MORE COPIES AND BILL US FOR THEM

ALAN BROCKBANK, builder
Salt Lake City

Prefabrication Issue

Your December issue with its first-class coverage of the status of prefabrication is the type of editorial excellence that we all expect from HOUSE & HOME.

Never has our advance in design been more apparent than in the 24 pages of color which highlighted this issue. This should be proof positive that prefabrication has long left the wartime boxy design era and has emerged as the leader in housing. I am pleased to say that the third and fourth quarter sales in this industry bear out this statement.

CONRAD "PAT" HARNESS
executive vice president
PHM3

The December issue has such a store of valuable information it should have a permanent place in the National Housing Center.

K. KNOX WITHERS, advertising manager
Knox Corp., Thomson, Ga.

Congratulations on your December issue! Again it was the masterful job that HOUSE & HOME can always be expected to do.

We sincerely feel, that the American building industry will present an entirely revolutionary picture in the next half century, and in looking back on the transformation, HOUSE & HOME will be able to take credit for being one of the chief instrumentalities.

DONALD J. SCHOLZ,
president
Scholz Homes

Congratulations! It gives those of us in our industry a warm feeling to have our thoughts and ideas so well expressed.

WILLIAM B. F. BALL,
president
General Homes

New Name for Prefabs?

Your campaign to rename the industry is certainly desirable and my personal opinion is that we should drop the name "Prefabricators" and merely become "Home Manufacturers".

K. J. LYTLE,
president
Modern Homes

To comment briefly on your campaign to rename the industry:
1. Hang in there!
2. "Brand Name" Homes does it!
3. I'm with you!
4. "Prefabrication" has almost become a cuss-word in some parts. In other areas, it is only now overcoming the stigma of the pre-1950 days of the barrack-type prefab.

RICHARD E. SNOW,
account executive
Foulton, Morrissey Co., Chicago

What an outstanding job you have done for prefabricated houses in your December issue.

But I'm opposed to the abandonment of the term "prefab".

It would be very unfortunate to elimi-

Medium, low, or high-priced homes — X-Panda Shelves can help you build them all better, at lower costs! X-Panda Shelves make your homes more saleable — and you can point with pride to them as extra evidence of quality, although they actually cost you less installed than quality wood shelving. These high-style expandable shelves come packaged and ready to install — there's a size, finish and type to match your needs. X-Panda Shelves belong in the homes you build. Why not write today?

X-Panda Shelves belong in the homes you build!

Prefabricated clothes closet shelf and pole set can be installed in less than 10 minutes.

X-Panda Shelves come in three attractive finishes — linen, aluminized and graytone.

Here's an economical, practical wall shelf. Stronger than wood or other shelving.
nate prefabrication now in favor of "components". Brother, I haven't got the money to educate everybody in New England as to the meaning of a component house.

KENNETH W. SPALDING, president Hodgson Houses

New FHA Income Requirements

Mr. Sweet's memorandum is certainly the culmination of a hard-fought campaign on the part of your magazine. It seems particularly significant that the memorandum is entitled, "FHA's Mortgage Credit Philosophy", for to change a philosophic concept is a more significant achievement than to change the details of its implementation.

F. J. NUNIIST, exec. vice president Mueller Climatrol

FHA's realistic attitude in connection with adequate and long warranty mechanical equipment, kitchen appliances, air-conditioning, adequate wiring, adequate insulation, etc., should actually reduce the drain on the home owner's pocketbook. At the same time the mortgage becomes a better risk.

A very vital side issue is the impetus this new policy should give to the nation's economy as a whole. It is indeed a far-sighted and extremely practical approach by the Administration to vital national issues.

With respect to providing adequate insulation, not only will this pay for itself over and over again in fuel savings and reduced air conditioning maintenance costs, but the original cost of the heating and air-conditioning equipment should be materially lower because of more insulation. In addition, there should be drastic savings in painting and repair bills.

It has been said that more aggregate damage has been caused to buildings by vapor and condensation formation than by floods or termite destruction. The depreciation of a building and the cost of repairs because of timber rot, peeling paint, wet and cracked plaster and masonry, runs into many millions of dollars annually. By providing the home owner with insulation which retards the flow of vapor and condensation as well as of heat, repair bills as well as fuel cost will be minimized.

ALEXANDER SCHWARTZ, president Infra Insulation, Inc.

We were delighted to hear about the FHA ruling. This new ruling can't help but be a great aid to all concerned.

Dwight R. Annin, general sales manager Whirlpool Corp.

Congratulations to House & Home for the results obtained in FHA's requirements on down payments. "Your mission has been accomplished."

FREDERICK C. KRAUSE, exec. vice president General Contractors Association of Contra County, Calif.

Real value in sales

I find your magazine of real value in my job, the sale of new homes in a residential development. Your information on financing, floor plans, new products, etc. are of great importance for the general improvement of the building industry.

W. F. LUND, sales department Thorpe Bros. Inc., Minneapolis

Gerber Plumbing Fixtures

Gerber Plumbing Fixtures Corp., 232 N. Clark St., Chicago 1, Ill.

Gerber specializes in quality fixtures for medium price homes. They are "luxurious", but without unnecessary frills that raise costs; they are inexpensive, but not "cheap" fixtures on which quality is sacrificed for price.

By specializing in fixtures for The Mighty Middle—the biggest home market—Gerber is able to keep prices reasonable and at the same time offer the deluxe features usually found only in fixtures costing much more. Gerber fixtures have smart modern styling and are available in six beautiful colors and white.

Gerber makes a complete line of vitreous china, steel enamelware, and brass plumbing fixtures. Write for folder 9-B of Gerber fixtures and complete "packaged" bathrooms.

If you sell homes in the most popular price range, you can add to their appeal—without increasing costs—with Gerber Plumbing Fixtures.

Gerber Plumbing Fixtures Corp., 232 N. Clark St., Chicago 1, Ill.

FOR FURTHER INFORMATION
SEE OUR CATALOG IN SWEET'S
OF WRITING FOR COPY
"New Andersen Beauty-Line* windows help me sell homes fast... cut construction costs."

says Hugh B. Thorson

Minneapolis builder of quality homes

I have featured Andersen WINDOWALLS in my homes for many years," says Hugh Thorson, well-known Minneapolis builder of quality homes. "The newest Andersen Unit—the Beauty-Line—is the best-looking window I have ever seen! It catches the eye of the prospective buyer at first glance.

"Best of all," Mr. Thorson continues, "the Beauty-Line is easy to handle, easy to install; it saves on-the-job labor."

More and more builders have found that the new Andersen Beauty-Line Units help put more sales appeal in their homes. The narrow meeting rail of the Beauty-Line—plus the combination of picture window effect with operating sash are powerful sales stimulators, with real appeal for home buyers. And, of course, all wood parts of the Beauty-Line Units are made of selected Ponderosa Pine, chemically treated for lasting protection against decay and termites. Units available in seven sizes, four heights, two widths.

For more information on Andersen Beauty-Line Units, see your lumber and millwork dealer, Sweet's Light Construction File or write to Andersen Corporation. WINDOWALLS are sold throughout the country, including the Pacific Coast.

*Patent pending.
Exceptionally narrow meeting rail provides better visibility, better design. Picture window effect and loads of ventilation, too!

Beauty-Line Windows add charm and distinction to this $25,000 home. Note how easily units may be joined together to form mullions and triples.

Andersen Windowwalls
ANDERSEN CORPORATION • BAYPORT, MINNESOTA

Builder Hugh Thorson has featured Andersen WINDOWWALLS in his distinctive homes for many years.
3 ways to cut

1. Use new 2·4·1 plywood as combined subfloor-underlay over framing 48", o.c.

2·4·1 is the new 1½” plywood that makes possible the revolutionary “panel and girder” floor construction system that saves from fifty to five hundred dollars per house. * It also gives you markedly superior construction. You save on both framing costs and application time. And because 2·4·1 has structural strength plus smooth surface, it serves as both subfloor and underlayment. More savings!

*Actual savings reported by builders vary with local wages, size of house and type of floor construction previously used.

2·4·1 is both subfloor and underlay. Inset 2x4 blocking supports panel edges. Drawings below show how girders set flush with footings improves appearance by lowering house about 12".
2. PlyScord® subflooring cuts application time in half, adds strength and rigidity.

PlyScord provides a smooth, dry, level working platform. It saves as much as 50% in application time. Requires fewer nails. Finish flooring goes down faster, too. Building paper may be completely eliminated. PlyScord subfloors are firm, solid. Rigid plate-like action gives added protection against windstorm or earthquake.

FOR COMPLETE INFORMATION about fir plywood floor construction, specifications, etc. write for free “Plywood Light Construction Portfolio.” (offer good USA only). Douglas Fir Plywood Assoc., Tacoma 2, Wash.

floor construction costs

3. Resilient flooring looks better longer over smooth fir plywood underlayment

Tile and linoleum lay flat, stay flat—with no unsightly seams or nailhead show-through—over smooth, solid fir plywood underlayment. It's an ideal base for wall-to-wall carpet installations, too. Easy to cut, fit and fasten, fir plywood grips nails firmly so they won't work up to mar the appearance of finish floor coverings.

Only panels bearing DFPA grade-trademarks are manufactured under the industry-wide Douglas Fir Plywood Association quality control program. Always look for the letters DFPA.
10,000 READERS
tell you what they’re looking for in houses

A REPORT TO THE BUILDING INDUSTRY

The first significant, region-by-region report on home-buyer preferences is now available on request. In one national and twelve regional editions, “What home buyers are looking for in your state” is compiled from the votes and opinions of 10,000 American HOME readers who judged the 1957 “Best House for the Money” Competition. This report contains a wealth of valuable information for the whole building industry.

Your copies are ready for you now. Write: Hubbard Cobb, Building Editor, The American HOME, 300 Park Avenue, New York 22, N. Y.

FOR HOME BUYERS
A real service . . . “showing houses of good design and good value that people can actually buy in their own community.” See 27-page portfolio in the February issue, announcing the winners of the 1957 “Best House for the Money” Competition.

FOR HOME-PRODUCT MANUFACTURERS
Better relationship with top builders . . . “proving the sales value of nationally advertised products in quality home construction.”

FOR HOME BUILDERS
Increased traffic and increased sales . . . “providing genuine live home buyers and a timely stimulus for the entire industry.” Expanded to 18 states in 1958.
THE AMERICAN HOME

SERVING 10,250,000 HOME-MINDED READERS

drives your message home

Idea by Idea—Product by Product—House by House
TEXTOLITE'S STUNNING NEW "BLOCK OF MARBLE" EFFECT

costs no more than wood—gives you many more selling features

Available in 5 rich color schemes, General Electric Textolite marble-pattern surfacing curves to follow contours of any wall . . .

looks more luxurious, cleans easier, and lasts years longer than wood

It's a luxury touch that helps close sales—at surprisingly low cost! Marble-pattern Textolite surfacing on walls looks like natural marble . . .
costs no more than fine wood paneling—yet outlives it by years!

Unlike wood, General Electric Textolite surfacing does not need periodic refinishing. It resists scratches, scuffs, and stains—cleans to a
sparkle with a damp cloth. And it's fast and inexpensive to install.

For specific recommendations on where Textolite can be of most value in your homes, check with the Textolite dealer nearest you. He's listed
in the Yellow Pages under "Plastics." Or send description of your surfacing problem to Laminated Products Dept., Section HH-82, General
Electric Co., Coshocton, Ohio. You'll get prompt help from thoroughly qualified surfacing experts.

You can choose from 70 market-tested colors and patterns in General Electric Textolite wall and counter surfacing. See them all in Sweet's
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Volume XIII, No. 2
HOUSTON... AND ITS MORE THAN 150 SUBDIVISIONS
HOUSTON

Where 65 competing land developers make it much easier for builders

For home builders, there is no other city in the country like Houston.

In most cities, a builder must buy raw land and develop it himself before he can start building houses. If he can buy developed lots at all, he has a choice of a few locations in a narrow price range. But in Houston, a builder can buy one or 1,000 lots in any part of town and in any price range. Reason: he has a choice of 156 subdivisions (shown as squares on the map, opposite). So in Houston over 90% of the builders buy finished lots.

The 65 developers of these 156 subdivisions compete fiercely for the builders' business. This makes life easier for the builder (some critics think too easy) because so many things are done for him by the developer. In addition to developed lots at reasonable prices (see page 92), he gets good land planning (see page 94) and good community facilities (page 96). Because several builders work in each development, there's a big variety in house design and this is an extra sales advantage for the builder (page 97). Most developers also offer their builders help with merchandising (page 98) and other problems (page 100).

Why does Houston follow this pattern of land development? For one reason, "It has always been this way." The Allen brothers, founding fathers of the city, laid out tracts and began selling lots in 1836. They've been followed, through the years, by many other developers.

In recent years, the pattern has been stimulated by the success of River Oaks (photo, left), which was started in the mid-20's by famed developer Hugh Potter, may now be the largest group (2,000) of expensive houses in the U.S. Its fine planning and careful restrictions have set the goal for many another Houston subdivision.

Another explanation of the growth of the land developer: Houston is the only major city in the country with no zoning. Without large (and therefore self-zoning) subdivisions which the land developer system makes possible, there would be no protection of property or investment.

They help make Houston a better place to live, too

The home buyer benefits because he gets the protection of restrictive covenants and the advantages of good land planning and good community facilities. Equally important, the public gains because Houston's alert city planning commission has to deal only with a relatively few developers, instead of a great many builders and it can act as an effective coordinator of growth.

The commission makes sure that land plans tie in with Houston's over-all road planning, and that space is provided for schools, churches, and recreational and shopping facilities. It also sees to it that Houston keeps some open, green areas. Since the war, the city has acquired 40 new parks, most of them in new subdivisions. (For more about "open areas," see page 102). Result of the Houston way: more orderly growth than you'll find in many cities with zoning.

To see how builders buy lots, turn the page.
MEADOWCREEK subdivision is southeast of downtown Houston. Ten different builders are now building houses here. Most houses sell at $16,000 to $20,000, but some go as high as $50,000. The developer is Architect-Builder Robert Clemens, new Houston NAMB president.

TANGLEWOOD, in the near west side, offers lots to builders of custom houses who have clients with money enough to afford sites that cost $1.10 a sq. ft. This 850-acre subdivision was started in 1950, has only 300 lots still open.

Builders can buy lots anywhere in town...

In many cities, builders report that finding good, "buildable" land is their toughest problem. Not so in Houston. Not only are there subdivisions in all parts of town, there are subdivisions of all sizes—from tiny four-acre neighborhoods to gigantic (6,500 acre) Sharpstown. City Planner Ellifrit reports that of projects started in 1955-1956, about 20% were under 100 acres, 50% were between 100 and 1,000 acres, and 30% were over 1,000 acres. Most of the better known subdivisions are large: Tanglewood covers 850 acres, has 1,000 lots; Westbury has 1,700 acres, 5,000 lots; Meyerland, 1.200 acres or 2,700 lots; Fairmont Park, 1,360 acres, 5,500 lots.

(A)Almost all the 156 subdivisions will soon be within city limits. Houston's present area of 165 square miles is about to be doubled through annexation of surrounding areas. This will make it the second largest city in area—after Los Angeles—in the US.)

The land developer gets the economies of mass production because he is developing so much land at once, and he passes a good part of the savings along to the builders.

Competition keeps lot prices reasonable

This is not to say land costs are low. They're not, because land prices in Houston—as in other fast developing areas—are high to start with. For example:

... in Meadowbrook, where houses sell at $20,000 to $26,000, an average 70' x 110' lot costs about $3,150.

... in Fairmont Park (houses $17,500 up) a 75' lot costs about $2,600, slightly lower because this subdivision is farther from downtown.

... in Briarmeadow, builders of houses selling for $25,000 and up pay $4,500 to $6,000 for lots. (Reports Builder Jack Caton, "This is cheaper than raw land across the street.")

No builder, of the dozens questioned by HAH editors, thought that lot prices were too high.
HIGH PRICED: Tanglewood (see aerial view opposite) is one of Houston's best addresses. When complete, it will have 1,000 houses. Fifteen different builders have already built 675 houses here. Prices range up to $100,000. Developer W. G. Farrington's aim: to build a postwar "River Oaks," with beautifully maintained streets, parks and neighborhoods. He gives his buyers long-term protection through restrictive covenants. Buyers get private police protection, use of pool, range up to $100,000.

Developer W. G. Harrington's aim: to build a must join a home-owners association and maintain their property.

in good neighborhoods in any price range

MEDIUM PRICED: Willowbend is a community of 700 houses in the $16,000 to $20,000 class. Sixty different builders have worked here. Its trees are a big feature, were carefully protected because lots with good trees are scarce in Houston and command a good price. Developer Krist Hubert (like many other developers) got his start in the building business. He was a painting contractor, now owns a lumber yard and builds some houses himself. He helps small builders by selling one lot at a time. He also provides some construction funds.

LOW PRICED: Pleasantville is one of the subdivisions that prompts Houston FHA Director Keith McAuse to say: "We are proud of the high standards that have been adopted here by builders for Negro housing." This FHA project has 436 houses like these, which sell for $6,700 to $7,500. There are also 300 rental units, a shopping center, elementary school and playgrounds. This is one of a half-dozen low cost minority subdivisions, some of which have self-protecting home-owners associations common only in far more expensive projects.

To see home of Houston's fine land plans, turn the page
Builders get the benefit of fine land plans produced

In many cities, a large percentage of even the newest subdivisions are badly laid out. Not so in Houston. Most Houston land developers have their new subdivisions laid out by professional land planners. They work closely with FHA's land planning office and with City Planner Ralph Ellifrit. As a result, many of the land plans (like the three on this page) incorporate the newest and best ideas:

...all streets are carefully laid out to minimize accidents. For example, most streets are curvilinear to discourage speeding; there is only limited access to residential streets from main highways, there are almost no hazardous intersections. (For more details on safe land planning, see page 107.)

...subdivisions are broken up into smaller, but integrated, neighborhoods.

...schools, churches, stores, parks and other community assets like swimming pools are carefully sited in relation to each other and to main roads (for example, many schools are located in park areas so placed that small children don't have to cross main roads).

A big advantage to planners of most Houston subdivisions: they have enough land to work with (80% of the new subdivisions are over 100 acres) so they can do a really good job. Says FHA's Houston Director Keith McCanse, "Large tracts lend themselves to more pleasing and economical layouts. Engineering can be better. Neighborhood values are better protected, too." (For example, the larger the subdivision, the smaller the number of peripheral houses that are not fully protected.)

Maurice Miller

MEYERLAND is one of Houston's prestige subdivisions. About 20 builders have put up houses ranging from $18,000 to $40,000. Developed by the First Mortgage Co., it was conceived from the beginning by President Tom Robinson as a project to give long-term protection to the mortgaged properties. Says Robinson: "We wanted a good subdivision at lower prices than River Oaks and Tanglewood but with the ultimate in protection. Protective measures are needed more in low cost than high cost developments, and by forcing rigid restrictions you get better results. We have an architectural control board, plans must be okayed in writing, there can be no duplication, and we control spacing of houses and setbacks." The land plan, developed by Architect Thompson McCleary, has safety streets, sites for three schools, churches. Photo, left, shows part of subdivision at upper left in plan.
by the competition among developers...

WESTBURY'S developer Ira Berne knew he would be competing with Meyerland, so he spent months studying housing projects and incorporated the best ideas he could find. Says City Planner Ralph Ellifrit: "Westbury has the characteristics of a well planned subdivision. It has major streets, wide or double streets where needed, and the street pattern discourages through traffic. Residential neighborhoods are quiet because streets are short and this discourages speed and through traffic. The big area is broken into many small areas. Schools and parks are combined. Sites for schools, churches, shops arc carefully planned, and schools are not put on heavily traveled roads." Says Berne: "When you own 1,700 acres as we did you can afford to spend an extra $50,000 on better planning, landscaping, boulevard streets in the first 100 acres of your subdivision because by doing this you increase the value of the rest of your land by as much as $500 an acre.

FAIRMONT PARK is Houston's newest large project. It is a half-hour's drive southeast of town, and its 3,500 to 4,000 lots may not all be built on for 10 years. Developer W. G. Farrington has applied the lessons he learned from Tanglewood, his earlier development: 1) Buy enough land at once to do the whole job. 2) Get professional land planners (he used Harmon, O'Donnell & Henninger). 3) Plan streets to slow down hot-rod drivers, use dead-ends to break up street patterns, plan peripheral streets leading where people want to go. 4) Locate schools early. 5) Be careful about church sites, as active churches blight adjoining land. 6) Have a central park and pool and build it early. (Fairmont has a 22-acre park.) 7) Get stores started early to discourage uncontrolled fringe stores. 8) Build a dignified entrance. 9) If you are out in the country, plan a parkway that leads to expressways downtown. 10) Protect buyers through deed restrictions.

...and the land plans are getting better and better

Visitors flying over Houston can quickly spot the subdivisions built since 1945, like Braeswood in the lower part of aerial photo at right. Curvilinear street plans and better planning contrast with the gridiron patterns in pre-war developments like Bellaire, background of photo: "Planning is steadily getting better," says City Planner Ellifrit. "Developers understand it better and cooperate more with us. They realize the competitive value of a good street layout. More than half the plans (by acreage) in recent years are good, with first-rate community designs. Nearly 40% more are fair and only 10%—mostly small ones—are poor."

To see good community facilities, turn the page

Ralph N. Miller
Builders benefit from good community facilities...

Builders often get blamed for the lack of community facilities home buyers need. Not so in Houston.

In Houston, even the smallest builder can buy lots in a subdivision that's complete with sewers and drainage, schools, churches, shops, parks and landscaped streets. The developer plans for all these facilities—and pays for the utilities. He's able to because he spreads the cost over all the lots in his tract.

Without provision for community facilities the developer's land plan would be turned down by the city planning commission (which has jurisdiction five miles beyond the present city limits).

Pools and parks are a feature in many a Houston development. Frequently, the developer gives them outright to a home-owners association; in other cases he sells them at cost. Land for churches and schools is also provided at cost. Private sewage plants (about 50) and water systems are often included in the development and sometimes financed by the sale of bonds.

Houston's Independent School District gets the credit for saving the builder from the nightmare of paying for schools. This authority, independent of the city, raises money through its own bonds approved by the voters. It has a big enough tax base so that raising money has not yet been a problem.

\[\text{Church} \] in Westbury is on land sold by developer at cost.
...and from the variety in house design

Look-alike houses are another complaint frequently made against the builder. Not so in Houston.

Houston's developers know that home buyers don't like monotonous rows of identical houses, so they don't permit them in their subdivisions. They encourage builders to buy scattered lots; and if the builder insists on buying land in blocks, most developers require that the houses be varied, insure it by requiring approval of plans. While architectural control is not always rigid, it results in a variety of design usually found only in the best subdivisions in most other cities in the country.

Another factor that encourages variety in Houston's subdivisions is the multiplicity of builders who work in each area. For example: 60 builders have built in Willow Meadows, over 30 in Sharpstown and Tanglewood, over 20 in Meyerland, Westbury and Briargrove. There are scores of subdivisions where more than six builders have built; relatively few where only two or three have put up all the houses.

The builders know this system benefits them. For example:

"... Builder Vernon Brattten says: "The other builders give variety to the whole neighborhood. Variety is a real advantage; people like it because they feel they are not in a project."

... Builder George O'Sullivan, who builds in several areas, puts it this way: "Variety in the subdivisions helps me sell houses. Buyers like it when each house is different."
PRESTIGE-BUILDING ENTRANCE SIGNS and formal entrance gates are now standard practice at most Houston subdivisions. Practically all sales appeal to the public is built around the subdivision name, so clearly identifiable entrance signs are of great importance. In many developments, the main entrance street is a wide, divided boulevard with handsome landscaping that gives an important look to the development. Many Houston families, when asked where they live, reply with the name of the subdivision rather than the name of their street.

Builders get plenty of sales and merchandising help

Many builders are so busy with all their other problems that not much gets done about merchandising. Not so in Houston.

To make their subdivisions popular and to keep sales moving, most developers use advertisements in the newspapers, radio and television spots, and signboards on major highways. The individual builder cashes in on this publicity. Only after the developer has attracted prospects to the subdivisions does the competition between builders begin.

Small Builder A. C. Wadley says, “Here at Briargrove, I don’t have to sell the community. The developer does that. In the beginning there were big ads in the Sunday papers. And the more the big builders in the development advertise, the more it brings people out. I sell off all this advertising.”

Builders get the sales help of professional realtors. In some projects the developer does all the selling, and builders pay a 2 1/2 or 3% commission. In other subdivisions, the builder can do his own selling, or have the developer’s realtors sell for him—or both. Perhaps more builders get professional realtors’ sales help in Houston than in any other city.

Besides this direct sales help, and the benefits of the community planning and facilities, builders often get suggestions on salable design or on merchandising methods from the developer. And, many builders report that half a dozen builders putting up houses in the same neighborhood is a good sales prop, “prospects like to know that they are buying in an area others like, too.”

NEWSPAPER ADVERTISEMENTS featuring the subdivision name are a big sales help to builders working there. Some developers do a series of advertisements that feature the name of each builder in turn, and show drawings of his house. Some big builders advertise too.
SALES OFFICES as elaborate as this are usually found only in the larger subdivisions, though most have at least a small office. This one is just inside the entrance gate at Meyerland. An experienced staff of realtors meets visitors, finds out their needs, takes them around to see houses for sale or under construction. At Meyerland, all selling is done through this office, and builders pay a commission. In most developments, even the smallest builder gets professional sales help and constructive advice from the developer’s salesmen.

from the land developers

SALES BROCHURES produced by the developer are another builder sales aid. They tell the story of the whole subdivision, emphasizing community advantages like schools, shops, churches. One of the brochures shown above outlines a community club’s rules and activities.

ROAD SIGNS promoting the more active subdivisions are a common sight around Houston. They help sell the subdivision name and location, often emphasize community advantages. This kind of advertising works for every builder in the development, saves him money.

For four other ways builder is helped, turn the page
Builders are helped these four other ways:

1. **Their money goes further**

   Because Houston builders can buy just the amount of land they need for immediate operations, they can use most of their capital for actual building, instead of having a big percentage of their capital tied up in land—a problem for many builders in other parts of the country.

   Builder Maggie Plumb says: "I build high-priced houses in different areas. But I'm a small-volume builder—12 to 15 houses a year—and I couldn't operate if I had to develop my own land.

   Builder-Developer Lawrence O'Donnell says: "Land development ties up money for a long time and you have to pay out money for taxes. You always have to have a lot more money than you think you will need."

   Builder J. D. Swanson says: "Buying lots lets me use my money for building. It takes a load off my back, lets me speed up my house turnover."

   Developer Ira Berne points out: "Yes, a builder loses the potential profit on the land—but he has time and money to build twice as many houses by buying lots from a developer instead of developing his own land."

2. **They have an easier time getting mortgage money**

   Houston has long been a money-short town. It has been a boom town, and it is a long way from the big eastern money markets. Yet, report many builders, this problem is eased when they build in the good subdivisions. The main reason: both local and out-of-town mortgage men know that property values in the good subdivisions are not only protected, but tend to increase rapidly.

   For example, Vice President O. P. Scheller of Connecticut General Life told H&H: "We have financed some houses in Meyerland because the developer has applied intelligent controls and has made public improvements which make it a medium-priced tract of unusually high quality. Because they have controlled architecture, placement of houses on lots, and landscaping; the result has been much better than a community could accomplish through zoning alone . . . they have avoided the barracks-like appearance of city blocks so common in many cities, including other parts of Houston."

   The Ohio National Life Insurance Co. of Cincinnati also buys mortgages on some Houston houses. Says Vice President E. C. Edmonds: "We feel that the large development properly laid out by competent planners, and adequately financed, offers the most desirable of all conventional house mortgages. We have learned over the years that neighborhood is one of the essential values to be observed in the lending of mortgage funds. Developments like these give the lender confidence that neighborhood values will be sustained for years because of uniform land planning and land improvement. All this adds up to stabilized land and house values."

3. **They have an easier time with public relations**

   In most boom areas, the builder is the whipping boy. He is blamed for the increased population, for the high cost of schools, for septic tank failures, for the rows and rows of look-alike houses and for most of the other hurly-burly results of rapid community expansion.

   Houston is different. Very few Houston people take a dim view of builders. Most Houston people think builders are doing a good job. And much of the credit for this goodwill goes to developers, who have created the conditions that make good public relations possible.

4. **They have real flexibility**

   In Houston, as developer Ira Berne points out: "A builder can notice on Sunday that sales are going well in a particular development. On Monday he can buy a lot there. On Tuesday he can get a building permit, and he can be starting his foundations on Wednesday."

   Houston builders contrast this with the problem of the builder who does his own land development. He must often buy land 12 or 24 months ahead. Because land costs pretty much determine the selling price of his houses, he must guess, when he buys today, what price house will be selling best two years from now.
Outmoded gridiron plans are still a common sight.

Areas between subdivisions often leave much to be desired.

Houston's system is still far from perfect...

While most Houston developers are doing an admirable job, many are not. Said City Planner Ellifrit: "About 10% of the land developed in the last few years was poorly planned, and another 38% was just fairly planned."

All prerear developments are saddled with outmoded gridiron patterns. And dozens of postwar subdivisions also leave plenty to be desired. They were crammed into areas that were too small for curvilinear streets and other marks of good planning. Or they were squeezed into long, thin strips—the only land many developers could buy.

Gaps between well-planned subdivisions have been filled with seedy sections—relatively new but slummy houses with do-it-yourself additions, unpaved streets without curbs or gutters.

Some subdivisions have been dismal failures. One large project, launched with a burst of hoopla, was badly overbuilt. Another project was so poorly planned and executed that a developer said: "If someone had written a book on how not to build a subdivision, that guy would have followed every rule in it."

True, Houston's growth is far more orderly than that of most booming areas. But it is still far from perfection. And there are no legal controls forcing developers to toe the line.

And there are signs that Houston's developers may be spawning a race of weak builders.

"We just coast along on the developer," said one contented builder. A vice president of the city's largest mortgage company agreed. Said he: "The developers' system makes it too easy for the builder. He rides along on the subdivider and makes no sales effort himself. Builders in one project thought the location was so good they wouldn't have to work. They got careless and sales fell off."

Some critics say the Houston system of easy and quick lot buying encourages builders to be "wet-finger-in-the-wind" forecasters—flitting from one subdivision to another and one price class to another without giving careful thought to their market.

A mortgage firm executive said: "The system makes it too easy to start building—any carpenter foreman can turn builder. I think Houston has more small builders than other cities." But a comparison of Houston with other southwest cities does not bear out that criticism. Houston's proportion of small to large builders is no greater than Dallas's or San Antonio's, and it is less than Tulsa's. The land developers don't keep builders small. In fact, most of Houston's developers got their start as builders.

...but almost everyone there likes it

Builder Jack Caton: "Developers let you have lots for nominal sums and you pay later. And you get more people out to see your houses."

Builder A. C. Wadley: "The thing that helps sell here is the size of the subdivision. We know we are protected. I can build here without needing much money and if a builder is short of cash, the developer helps work out a deal for him."

Builder Rex Williams: "I'm a small builder and I couldn't develop my own land. I don't have that kind of money."

Builder George O'Sullivan: "The best money any builder can pay out is to a hard-hitting sales organization. Here at Fairmont they handle sales and this saves me time. I'm only one man if I try to build and sell alone but here there's a whole group working for me."

Builder Vernon Bratten: "I like other builders to build in around me. The others give variety to the whole neighborhood. Buying lots here is proven and not just pioneering. We have good architectural control and our restrictions are good. A person investing here will not have a $15,000 house next to his $21,000 house. The subdivision does all my selling for me."

An official of T. J. Bettes: "Yes the system makes life easy for the builder and it has some disadvantages. But it has a lot more assets than it does liabilities. Both the planning and the houses get better here every year."

FHA's George Humphreyville: "The public will get the benefit as more builders work in subdivisions. In these big subdivisions you get more variety, and you get better land planning simply because the project is larger."

February 1958
HOW TO SAVE OPEN SPACES

while there still are some left to save

In the next three or four years Americans can decide how decent a place this country will be to live in for generations to come.

Already huge patches of once green countryside have been turned into vast, smog-filled deserts that are neither city, suburb, nor country, and each day—at a rate of some 3,000 acres a day—more countryside is being bulldozed under. You can't stop progress, they say, yet much more of this kind of progress will give us the paradox of prosperity lowering our real standard of living.

The problem is the pattern of growth—or, rather, the lack of one.

Because of the leapfrog nature of urban growth, there is still a surprising amount of empty land even within the limits of most big cities. But it is scattered; a vacant lot here, a dump there—no one parcel big enough to be of much use.

And with this same kind of sprawl we are ruining the whole metropolitan area of a the future. In the townships just beyond today's suburbia there is little planning. Development is being left almost entirely in the hands of the speculative builder. Understandably, he follows the line of least resistance. In his wake is left a hit-or-miss pattern of development.

Aesthetically, the result is a mess and is unnecessary. With characteristic optimism, most Americans still assume there will be plenty of green space on the other side of the fence. But this time there won't be, for in the great metropolitan expansion the subdivisions of one city are beginning to meet up with the subdivisions of another.

Flying from Los Angeles to San Bernardino—an unnerving lesson in man's infinite capacity to mess up his environment—the traveler can see a legion of bulldozers from Los Angeles gnawing eastward into the last remaining tract of green between the two cities, and another legion of bulldozers from San Bernardino gnawing westward. High over New Jersey, midway between New York and Philadelphia, the air traveler has a fleeting illusion of green space, but most of it has already been bought up, and outlying supermarkets and drive-in theatres are omens of what is to come. On the outer edge of the present Philadelphia metropolitan area, where there will be one million new people in the ten years ending 1960, some of the loveliest countryside in the world is being irretrievably fouled, and the main body of suburbanites has yet to arrive.

The banks of our rivers—assuming one would now want to swim from them—have been despoiled and our shorelines are going fast. In the whole stretch of Ohio's shoreline along Lake Erie, for example, practically no beach areas have been saved for the people. Along the Atlantic coast little free beach remains and the sewage outfalls gurgle ever more fetidly. Back in 1935 the National Park Service pinpointed twelve stretches that could be bought fairly cheaply by the government. Only one stretch was bought; the National Park Service had no authority to buy land for new parks, and the legislation to do so depends pretty much on local initiative.

On Cape Cod a magnificent stretch of open beach sweeps south from Provincetown some thirty miles to Eastham. It remains almost as it was when Thoreau walked along its dunes, and to many a New Yorker or Bostonian jaded by summer in the city, the sight of it is a wonderfully exhilarating experience. But it too will go. The National Park Service has made some gestures toward acquiring it, but all the effort seems to have accomplished is to stimulate local cupidities. At Highland Light, on the moors of Truro, the subdivision billboards are already up, and the old view will soon be gone.

"And what pictures," Thoreau had said of it, "will you substitute for that, upon your walk?"

continued on next page
Sprawl is bad for everybody—

Where land is being used up too rapidly, without control, five acres are being made to do the work of one, and do it very poorly. This is bad for the farmers, it is bad for communities, it is bad for industry, it is bad for utilities, it is bad for the railroads, it is bad for the recreation groups, it is bad even for the developers.

Where the new developments are scattered at random in the outlying areas, the cost of providing services becomes excruciating. There is not only the cost of running sewers and water mains and storm drains out to Happy Acres, but much more road per family has to be paved and maintained.

Who foots the bill for the extra cost of services? Not the new people. Conventional tax practice spreads the load so that those who require the least services have to make up the difference. Where it costs $30 per household to furnish homes in town with water, it will cost about $80 for houses in the outlying developments. Since the water rate will be uniform, the townspeople have to make up most of the added cost.

Sprawl also means low-volume utility operation for the amount of installation involved. A square mile can accommodate, quite nicely, 2,000 dwellings and accompanying schools, churches, and neighborhood shopping facilities. Because of hit-or-miss development, however, a mile more usually contains only about 200 small homes—and one-twentieth of the power demand.

Sprawl has been nibbling away at so many industrial sites that some railroads and utilities have started advance land-acquisition programs of their own: Cleveland Electric Illuminating Co., for example, has bought 2,000 acres on the outskirts of the metropolitan area and is holding it for future industrial use.

The developer himself is hurt by sprawl

Without an open-space plan, there is little assurance that Happy Acres can retain the amenities developers feature in their sales pitch. This may not be important for a hit-and-run
it's bad aesthetics and bad economics

builder, but it is very important for a big one. His revenue comes not alone from the sale of homes, but also from the prosperity of the shopping center, and he has a vested interest in the permanent character of the community. Chicago's huge suburban village of Park Forest is a good case in point. Not only did its original plan provide plenty of open space in the village; more to the point it located the village on the edge of a Cook County Forest Preserve.

An open-space plan would preempt many sites

In many areas this preemption would force the land developers to the hillside. Recent improvements in earth-moving equipment, however, have made hillside tracts more economical. Los Angeles builders have had to take to the canyons and the hills, and one of the most spectacular sights in the country is the way they are literally moving hills and terracing canyonsides for sites.

Enlightened real-estate men are coming to feel that the old concept of "highest and best use" is outmoded. As generally used by realtors and appraisers, it means that the land has its highest and best use in terms of immediate dollars. But Boyd Barnard, Philadelphia real-estate man says: "We may need to redefine 'highest and best use' in terms of suitability in the over-all economic scheme of things, rather than the use which will produce the highest monetary return. A qualitative concept would preserve and create parks. The value of amenities for future generations resulting from proper planning in and around our growing metropolitan areas cannot be measured."

The need for group action in the common cause would be pressing in any event; what makes it urgent is the new highway program. Under the provisions of the Federal Highway Act of 1956, some 41,000 miles of new highway are going to be laid down, and the effect, as the planners of the act have frankly declared, will be a revolution in living habits.

continued on next page
RESISTING METROPOLITAN SPRAWL. For over a century, Central Park’s 840 acres of greenery resulted from a happy conjunction of a few men’s foresight and current public taste.

What should the program be?

In many areas the opportunity has already passed, but it is not too late to lay down sensible guidelines for future communities. And it is not too late to reserve open space while there is still some left—land for parks, for landscaped industrial districts, and for just plain scenery and breathing space.

Ironically, for the fundamentals of a workable plan, the best guide is not what is being done now but what was done years ago. For there have been open-space programs in the past—brilliant ones—and unique as each may have been, together they provide several valuable lessons.

New York’s Central Park. In 1844, William Cullen Bryant took a walk over the hilly countryside north of the city. It struck him that a large tract should be bought for a “central reservation” while land was still cheap, for eventually it would be surrounded by the growing city. He started to agitate for it. Ridiculous, said the Journal of Commerce: there is plenty of countryside for people to go out and see, so why pay for it? But the populace liked the idea; the politicians declared for it, and in 1856 it became a reality.

Cook County Forest Preserve. In the early 1900’s a group of Chicago citizens conceived the idea of buying up large tracts of land in the country around Chicago for the enjoyment of present and future generations. In short order they lined up public support, and after several rebuffs in the courts, the Forest Preserve was finally established. Promptly it started buying land. Today there are 44,000 acres in the preserve, valued at $150 million, and Superintendent Charles Sauers is still buying land—at a rate of 1,000 acres a year.

Cleveland’s Park System. William Stinchcomb, father of Cleveland’s superb park system (which embraces some 14,000 acres of natural woodland), delighted in horrifying visiting planners by telling them how he planned the system. He got the idea one weekend, sketched it out of a piece of paper—then spent the next thirty years filling in the purchases.

Westchester County Park System. Back about 1900 a private citizen named V. Everett Macy took a horseback ride along the Bronx River Valley and was appalled by the maze of shanties he saw. A group of millionaires had just built a private road on Long Island, and it occurred to Macy that it would be a good idea if a scenic road bordered by trees and meadows were built along the Bronx River. After some badgering, the state legislature set up a commission to acquire the land (New York City was to foot 75 per cent of the bill, Westchester County the rest).

A little later, political boss William Ward was sitting on a park bench in Cleveland. He spied a “Keep Off the Grass” sign. This annoyed him. He began to ponder how little grass there would be for Westchester County people to enjoy if a lot of land wasn’t bought up quickly. On his return, he set up the Westchester County Park Commission, and instructed it to buy up waste land. As to how it would be used, he said, they could worry about that later. Eighteen thousand acres were picked up this way, and today they constitute, save for golf courses, about the only open space in the most populated section of the county.

Ohio Conservancy District. After the great flood of 1913, businessmen of Dayton, Ohio, decided something ought to be done. With their own money, they brought in consultant Arthur Morgan. Morgan concluded that the flooding problem couldn’t be solved by local reservoirs or channels; instead, he proposed that a district be set up covering the whole watershed area. Its powers would include taxation, eminent domain, and the right to issue bonds. The businessmen got the enabling legislation passed by the legislature in 1914. With no funds from the state, the group built five dams and started acquiring land for flood control and recreation purposes. Before long, similar districts were set up throughout the state. The district form still has some legal bugs in it, but there are a score of lakes that never existed before, and thanks to the land-acquisition program, plenty of recreation land around them for people to enjoy.

The Boston Metropolitan Park System. Under the leadership of Charles Eliot, landscape architect, the cities and towns around Boston got together in 1893 to establish “reservations” on the outskirts of the built-up area—the Blue Hills Reservation and Middlesex Fells Reservation were acquired, but urban sprawl has now extended around and beyond them. A year ago the Massachusetts General Court approved a new project for “The Bay Circuit”—a belt of open spaces some twenty miles from the State House, with proposed reservations, forests, and parks separating metropolitan Boston from Lawrence, Lowell, Worcester, and Providence. The state has been authorized to proceed.

continued on p. 202
ALMOST EIGHT TIMES more auto accidents occur in gridiron subdivisions than in curvilinear tracts of the same size and population density. The accident-rate figures are based on a five-year study of 86 Los Angeles subdivisions. Sample was balanced to provide equal areas.

ARE YOU PLANNING A SMASHUP?

You may be, if you are planning an old-fashioned gridiron subdivision like the one at left, above.

A new five-year study of 86 subdivisions shows the accident rate is 85% lower in curvilinear tracts than in straight-line gridiron layouts. Although the study is based on residential tracts in Los Angeles County the sample was big enough so the results should apply to your community, too.

Curvilinear tracts are much safer even though they average 65% more intersections than gridiron layouts. Big reason: Most curvilinear intersections are safe three-way junctions instead of the gridiron's four-way crossings that invite accidents.

Add to this impressive safety record the cost benefits of curvilinear layouts: they make it easier to fit houses to the land, minimize grading, ease drainage problems, produce more lots with fewer streets and shorter utility runs (see H&H Aug. '57).

Or are you planning a better place to live?

From the home buyer's point of view, a subdivision laid out with curved streets looks better and is a more pleasant place to live. With curvilinear streets, you never get a monotonous view down block after block of house fronts. Trees, shrubbery and lawns become more prominent. Fast driving and through traffic is eliminated by the layout pattern.

And a bonus for builders: safety is something you can sell to prospective customers. What family wouldn't choose a community with 85% fewer accidents?

For “six rules for safer streets,” see page 204
BROAD SLOPING ROOF with low eave line ties country house to its sloping site. Concrete block wall hides living areas from entrance drive.

RUSTIC HOUSE FOR A RUSTIC SITE

Rough materials and low eaves that almost hug the ground give this simple house its sense of belonging to the site.

The architects helped their client choose the site and made a point of preserving its natural disorder. In their words: “We wanted to keep the lot as we found it.” But a lot left in its natural state demands a house to match—one without the appearance of machined perfection. So this house was built of rough cypress siding and concrete block. Inside, the block was left exposed and a concrete floor was used in all the rooms. These materials, and much of the interior trim and built-ins, were left without finishes wherever possible. The idea: to show their textures, let them age naturally, and give them a warmth and roughness that blends with the tangle of the site.

An extra benefit from this use of materials: a home that, in the architect’s words, is “virtually careproof.”
FRONT WALK leads under wide, open roof overhang, from carport to entrance (not in photo). Pine tree, placed where house meets concrete block wall, makes a well planned break in the line of movement. Roof members are heart redwood.

LARGE GARDEN (below) is behind the concrete block wall seen in color photo, opposite. Living area of house opens directly to it. Exposed rafters continue the roof overhang to give it extra depth, make it visually more striking.

ARCHITECTS: Dees-Porch and Grunberg
BUILDER: Daniel Barber
LOCATION: Northern New Jersey

continued on next page
WINDOW WALLS open living room to garden. But room seems protected because garden is shielded by walls on two sides, planting on other.

Rustic house continued

Indoors and out, there is a strong sense of shelter

PLAN shows how all rooms except kitchen open to partly enclosed gardens. And even kitchen is protected by deep roof overhang outside its windows. Living room and guest bedroom share the largest garden; master bedroom's garden is separate (photo, right). Location of front door—it can't be seen from entrance drive—adds to planned privacy.
DETAILS show how the architects used light and shadow, pattern and texture in effective ways. Left to right: exposed roof members cast shadows on concrete block wall; delicate lines of Japanese pine tree contrast with rough concrete block; vines make dark pattern on jalousie window.

MASTER-BEDROOM GARDEN (below) is sheltered on all sides. High and low walls hide it from neighbors, open it to privacy of owner's land.
Patio house was planned in two units, one for daytime use, the other for sleeping. Patio serves as circulation area as well as outdoor living space; so house needs no foyer or bedroom corridor. Carport to the south screens the patio from the street, protects its privacy.

Patio House for a Small Lot

The neat little Florida house shown on these pages is one of the clearest demonstrations to date of the three great advantages of a good patio plan.

Those advantages are—
1. a greater sense of space;
2. a better balance of light;
3. a cooler breeze in every room.

For here is a house with only 1,100 sq. ft. of enclosed space—yet each room appears to be at least twice its actual size. Reason: every room opens onto the central patio and borrows space from it. Moreover, this outdoor space is shielded against neighbors, so the house enjoys the kind of outdoor privacy generally found only on very big lots. (The lot here is only ½ of an acre.)

Here, too, is a house with 650 sq. ft. of glass walls—yet there is no glare problem. Reason: a huge, 250 sq. ft. plastic skylight over the patio brings enough light into the center of the house to balance the light coming in through the glass walls.

And here is a very compactly planned house—yet nowhere is it more than one room thick, and no room lacks cross-ventilation. Reason: the central patio is open at both its ends, thus acts as a fresh air supply duct for every room facing it. A curtain of insect screening across the open ends of the patio keeps out Florida’s murderous bugs.

250 sq. ft. skylight (left) consists of laminated wood ribs supporting ⅛” thick, rigid plastic. Ends of vault are filled in with plate glass. Floor of entire house is terrazzo; walls are 8” thick lime block.

All rooms open onto patio (right). Top picture shows living-dining area extending into central court through 15” glass doors. Bottom picture shows how a small guestroom gains space from adjoining patio.

continued
DRIVE-THROUGH CARPORT screens the entrance court against the street, is linked to main part of house by covered walk. Since view at rear of lot is to the north, entrance court provides a protected outdoor area facing the midday sun.

Patio house continued

Shut off from the street, this house is open to the view

Perhaps the most important thing about this house is that it makes none of the mistakes usually found in small, suburban houses. Specifically—
- The carport isn’t just an afterthought, stuck on at one end; it is used as an effective screen to give privacy to the lot, and as a porte cochère to give the house a gracious and formal entrance.
- The glass wall isn’t just a cliché (and an invitation to the neighbors to stare into the living room); it is used to open up a view of a bayou.
- In short, the small lot isn’t just a place on which to dump your house; it has been carefully enclosed by screens and patio to provide the most in protected outdoor living.

Two years ago this house was built for only $13,000. Its materials and details are simple; its size is small and so is the lot; it has no gadgetry and no ostentation. Instead, it has something infinitely more valuable—it has intelligent design and good taste. Only these can transform a pile of concrete blocks into a first-rate house.

LIVING ROOM faces bayou through 16’ wide sliding glass wall. Beyond this is line of screening that encloses house and protects it from insects. Openness of plan makes entire house a breezeway which cools the interior during most of the year.
Sewage disposal used to be almost the last thing you would worry about. But today it is one of the toughest problems builders and developers have to meet.

America is fast running out of land suitable for on-lot disposal. Experts say septic tanks won’t work in half the US. And most of the land you can build on now is out beyond city sewers or in problem areas bypassed in the city’s outward growth.

To help you meet the sewage problem, House & Home here publishes a round-up of data and information on today’s good practice in solving the problem. Local standards may be more or less strict; examples should be read with this in mind. In some states there are a lot of them you can’t use. Check local health officials, and don’t go very far without the help of a professional engineer.

Don’t assume you can’t connect with city sewers

If you are building out in the country, check your local authorities to see if a sewer main is planned to reach your area, and when. Connecting with city sewers is sometimes easier than you think. Overlook no possibilities. (Classic example: the Alabama builder who almost put in septic tanks because he didn’t check sewer maps that plainly showed a line ran right through his property.)

Even though you can’t hook up to city sewers today, you may be able to speed up city sewer service by taking temporary steps. For ways to do this, see page 123.

Community treatment plants cost less than you think

If you can’t connect with city sewers, your best bet is to put in a small or large community system. If you plan to build 25 houses or 2,500, there’s a sewage plant to suit your needs. These plants vary widely, but all have one thing in common. Each is an efficient way to get rid of a certain per cent of waste solids in a given volume of sewage. The plant you need depends on the volume of sewage and the size and use of the stream the effluent reaches. Builders have found several ways to finance these plants and even make money on them. For the kind you should have, see page 117.

An on-lot system should generally be a last resort

If you can’t have city sewers or a community system, you must use a single-family disposal method. This usually means septic tanks. Requirements for them have stiffened, raising your cost. But on the right soil, septic tanks are effective “if adequately designed, constructed, maintained and operated,” the US Public Health Service says. If soil is unsuitable, some health boards allow use of the controversial new aeration tanks, which provide better service than septic tanks in poor soil. Be sure you know the rules for using on-lot systems. For details, see page 122.
SCUPPERS project 4’ beyond edge of house, drain flat roofs into rain basins located at each corner of the house. Such details recognize special, subtropical weather conditions encountered in Florida. Deep overhangs shade interior, protect walls from torrential rains./END
There's a community treatment plant to fit your needs

Treatment plants range from fairly simple small units that cost only $3,000 or $4,000 to large, complex systems that cost over $1,000,000. The kind you need depends on two basic factors: the volume of sewage treated and the kind of stream it flows into.

If the sewage volume is low and the stream large, you may need only a low-cost primary treatment plant

Example: Your 50-lot site slopes down to a broad stream two miles above the next water intake point or recreation area. Your plant can be 1,000' from the houses.

In this case, an Imhoff tank should prove adequate. There will be some odor, but the small plant will be far from any houses. Your initial investment will be low (perhaps under $5,000), and operating costs will be negligible because there are no motors or moving parts to maintain. (See also fig. 1, p. 118.)

Example: Your 200-house tract is on a river a few miles above the next town. Your plant will be only 500' from the nearest houses. Lenders require the plant to have no odors offensive to home buyers.

A mechanical clarifier will provide the primary treatment health officials require, and there will be little or no odor. The size of your development will permit you to afford the small maintenance costs. This plant should cost under $20,000. (See also fig. 2, p. 118.)

If the sewage volume is large and the stream small, you will need "complete" (secondary) treatment

This is also true if the stream is large but is used for recreational purposes or as a nearby source of water. Principal types of complete treatment plants are: 1) trickling filters, 2) activated sludge systems, 3) lagoons and 4) sand filters.

Example: Your 200-house tract lies on a lake and your plant will discharge into it. The highest degree of treatment is required to preserve the lake for swimming and fishing. City authorities have agreed to take over the plant when your tract is built up.

In this case you should put in an activated sludge plant, which provides the highest degree of treatment. Cost: about $50,000. Operating costs are high but the city will bear them. (See also fig. 3, p. 119.)

Example: Your 50-house site is small, on a stream that flows through a park. Authorities require complete treatment. Power costs are high in the area, and your buyers must pay operating costs when the plant is built.

Here you might use a low-rate trickling filter, which may cost about $35,000. It provides nearly as much clarification as an activated sludge plant but is much cheaper to operate. (See also fig. 4, p. 119.)

Example: You have a 100-house development but in a year will build 200 more. Effluent can be piped into a stream a quarter of a mile away.

Authorities may allow you to use a high-rate trickling filter followed by a chlorinator. High-rate filters do not clarify as well as low-rate filters, but they handle much more volume per square foot of filter. Chlorination helps clarify the waste at relatively low cost. This plant may cost about $70,000. (See also fig. 4, p. 119.)

Example: You plan to start out with only a dozen houses, gradually build about 100 over the years, all on large lots. Your tract is in a built-up area, and there is now no flowing stream nearby. City sewers are promised within two years.

A sand filter system will serve your first 20 houses well. It will provide excellent treatment. The system will cost perhaps $12,000, depending on the availability of the right size sand. It takes up a lot of land space but your acreage is ample. When city sewers come in, the cheap plant can be abandoned. (See also fig. 5, p. 118.)

Example: You plan to build 2,000 houses and a shopping center on a big tract ten miles out from a big city. Drainage is away from the city on gently rolling land.

Here your best bet is a sewage lagoon, if natural conditions and authorities permit them. Lagoons are extremely cheap where land costs are low; operating costs are nil. When your area builds up and land prices skyrocket, then you can put in a compact plant and build on the big former lagoon site. (See also fig. 6, p. 118.)

continued on next page
1. **Imhoff tanks** have two stories. An upper chamber retains the raw sewage just long enough to let heavy solids settle through a trapped slot to the bottom chamber. Bacteria in the lower chamber reduce the solids to sludge. (In all systems, treatment consists of changing inorganic material that can putrefy into stable organic material by bacterial action.) Gases in the bottom tank escape at the sides of the Imhoff tank, thus do not hinder the process. About 35% of the sewage remains as sludge, later is pumped out to dry or be hauled away.

2. **Clarifiers** are round or rectangular tanks that settle out heavy solids (about 35% of the sewage parts). Clarifiers are always accompanied by digestion tanks in which settled out solids or sludge is reduced by bacterial action. Mechanical scrapers in the clarifier remove scum from the surface and settled solids from the bottom into a pocket or hopper, from which it is pumped to the digestion tank. The two tanks may be side-by-side or one above the other. There is little or no odor problem, since gases occur only in covered digester.

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**Here's the basic technical knowledge you need**

3. **Sand filter** systems usually consist of a large septic tank, a dosing chamber, a large sand bed about 2' deep, and an underground drainage system to carry the effluent into the drainage area. If the filter is properly designed and maintained, health authorities will probably allow the effluent to flow into any stream bed because sand filters prove excellent treatment through biochemical action and settling. This system is rather costly because the filter bed must cover a wide area, and the sand must be replaced periodically.

4. **Sewage lagoons** have gained much favor among sanitary engineers and health authorities in the last two or three years. They are being used in more than a dozen states. Lagoons have even found favor in metropolitan areas, despite the fact they require a lot of high-cost land. If carefully designed and not overloaded, they provide complete treatment and present little or no odor problem (even in the north where they freeze over in the winter). Upkeep cost is nil. If lagoon is used only temporarily, site can be built on later.
3. **Activated sludge process** involves a high degree of aeration of raw or pre-treated sewage. Air is either pumped into the sewage or the sewage pumped into the air, so that ample oxygen helps bacteria reduce the sewage solids into “activated sludge.” This sludge then flows into a secondary settling tank. Some is pumped back into the aeration tank to replenish the supply of organisms and speed the process. The method clarifies up to 95% of the sewage particles. Operating costs are high because a great amount of pumping is needed.

4. **Trickling filters** sprinkle primary-treated sewage over a bed of coarse stones or similar material, where bacteria clinging to the stones oxidize the sewage. Stone beds are usually about 6' deep. The sewage must run from the filter to a settling tank where the biological slime settles out. There are two kinds of trickling filters. Low-rate or standard treats only about one-fifth as much volume per square foot as a high-rate filter but takes out about 85% of sewage parts vs. only about 70% removed in high-rate filter systems.

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**to know how each type of treatment plant works**

7. **Sludge digesters** are usually covered tanks in which bacteria convert the sludge from a secondary treatment system into gases and inoffensive liquids that are drained out into drying beds. In large plants, sludge is sometimes dewatered by big rotary vacuum filters and dried by heat. Digested sludge has some value as fertilizer. Gases developed can be piped out and burned to avoid an odor problem. In large plants, the gas is often used to help heat the digester itself. A heated digester can handle a larger volume of sludge.

8. **Prefabricated plants** are shipped assembled or knocked down on trucks or flat cars by three manufacturers—Chicago Pump Company, Dorr-Oliver and Yeomans Brothers Company. These plants provide complete treatment by either the trickling filter or aeration method. Yeomans and Chicago Pump have hundreds in operation around the US. Dorr's has just been introduced. Most states approve these plants, provided locally licensed engineers attest that they fit local conditions. The plants serve from 25 to 1,000 houses.

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*continued on p. 120*
Here's a quick rule-of-thumb guide to the cost of a complete treatment plant

Graph represents the cost per house under normal conditions where there are no problems of terrain, excessive local requirements or other factors to boost your plant costs. Builders report costs for sewage treatment plants to serve 100 to 200 homes range from a low of $15 per house (with temporary lagoons) to a high of $600 per house (where problems were acute). A rule of thumb for a 100-house "package plant," manufacturers say, is: 100 houses times 3.2 people times 100 gallons of water used daily per person, times $1 to $1.25. Thus the plant would cost from $32,000 to $38,000, not counting pumping equipment but including an engineer's fee of from 4% to 8%.

How can you finance a sewage treatment plant?

"I have a list of more than 100 home builders and realtors who want to put in treatment plants but are stymied for lack of capital," reports one equipment maker.

The problem of financing plants certainly has not yet been solved. Most lenders will not put up the money—because a plant will be worthless as security if the development fails. FHA does not have authority to insure sewage plants. Many in the industry and in the public health service argue that the Housing Act be amended to allow this, but so far there has been too little demand to get action started.

Yet there are several ways home builders have managed to finance their plants without having to put up the whole amount of money out of their own capital.

Here are six financing devices:

1. Get owners of adjacent tracts to join with you. This usually means the plant will be better suited to the needs of each cooperating builder, and your outlay will be cut sharply on a per-house and total outlay basis.
2. Sell enough lots to pay for the plant. You can get more for the lots by promising sewerage service soon.
3. Give your lender liens on enough lots to cover first costs, repaying out of profits on the first houses sold.
4. In a few states you can incorporate as a town with very few residents. Then the town can approve utilities and issue revenue bonds to pay for them.
5. Get your county to pay for the plant with a bond issue, under an arrangement in which your home buyers must pay taxes ten years or so to cover the plant's cost.
6. If you have real construction know-how, you may be able to cut costs about 25% by building the plant with your own equipment and labor force.

Over the long run, you stand to gain

Almost always the initial investment required to finance a sewage system more than pays off in added long-term profits. Evidence: A recent survey of 61 subdivision plants in 12 states showed that 36 builders had gained more in higher appraisals than they had "lost" because the treatment plants cost more than individual septic tanks. Paul W. Richards, US Public Health Service engineer in Atlanta, says only a few of the builders reported a net loss and they believed "the slight monetary loss was more than offset by enhanced sales potential."

Evidence: Most builders who have put in community plants say local authorities will allow you to build on smaller lots if you have a sewerage system rather than septic tanks. The extra profit from the added houses will more than pay for the treatment plant in most cases.

Evidence: If your state permits you to operate as a private sewerage utility company, you can often expand your system to serve other developments. On a long-term basis, this has strong tax advantages. If your rates are in line with current charges in your area, this is acceptable practice. (FHA approves mortgages on houses served by private community plants only when home buyers will not be charged unduly.)

Your plant may cost even less than septic tanks

If you can spread your treatment plant costs over enough houses, your expenses will often be far less than for septic tanks (where septic tanks cost $300 to $350, the upset figure is often about 100 houses).

In Houston, one developer, reported by Richards (see above) put in a treatment plant for a 1,000-house subdivision. The cost was $463 for the first 80 houses hooked up to the system, but it will drop to an average of $106 per house when all the homes are built. Septic tanks would have run about $300 a house, $163 less than the sewage system for the first 80 units but almost $200 more per house when the tract is completed.

Another Texas builder found sewers and a plant less expensive than septic tanks even for 29 houses in the $35,000 price range. The sewage system cost $635 per house, less than it costs in his area to install septic tanks properly.
You can cut first costs by building your plant in two or more stages

Many Florida land developers do just that. Plants are designed so that units serving the first group of houses can be converted to other uses and combined with additional units when more houses are built. Thus plants can be designed in two, three or more stages to fit the volume of sewage and degree of treatment required.

First costs cut $50,000

The stages diagrammed at top right for Marquesee Associates' Lyons Park tract in Pompano Beach, Fla., cut the builder's initial money needs about two-fifths.

Stage 1 cost $75,000—or $600 a home for the first 125 houses. It consisted of a 18½' high Imhoff tank, a standard-rate trickling filter, a lift pump and a final settling tank, with chlorine added into the effluent line.

Stage 2 was designed for the first 250 homes. One unit was to be added, the others altered for different functions. However, this stage was never built; Lyons Park developed so fast it wasn't needed. In this stage, one unit—a combination primary and secondary clarifier—was to be added, the Imhoff tank would become a sludge digester, the trickling filter would convert from low-rate to high-rate treatment, and the original settling tank would become a chlorination tank.

Total cost: $140,000

Stage 3 cost an additional $65,000. This brought the cost per home down to $280 for the 500-house tract. The total includes the cost of several pumps needed in this flat area to bring the sewage into the plant and carry the highly clarified effluent more than a half-mile away to the nearest stream.

Plants built in stages cost more, in the long run. In the Lyons Park case, the two-stage plant cost perhaps $15,000 more than it would if the final plant had been built at the outset. Yet by building as Marquesee did, there was less danger of getting stuck with too big a plant if sales turned out poor. And it meant that the builder did not have to tie up the extra $50,000 during the first part of his building program.

LYONS PARK'S COMPACT PLANT now gives complete treatment to 170,000 gallons of sewage daily. Plant was designed by Philpot, Ross & Sassinen.

FLOW DESIGNS for three-stage plant show how more volume can be treated by adding one new unit and changing the functions of the others in each successive stage.

COMPLETED PLANT serving 500 homes pumps raw sewage to clarifier (1), high-rate trickling filter (2), final settling tank (3) and chlorinator (4). Some treated sewage goes back through pump station (5) to the first clarifier. Sludge from clarifier is pumped to digester (6). Gas is burned to kill odor at (7) and sludge flows to drying beds (8).
Three on-lot systems: handle them with care

1. Don't try to cut corners on septic tank system expenditures

In the long run you'll be better off if you oversize rather than undersize your septic tanks and leaching trenches. Health authorities say this is now common practice among the "old pros" in home building. These builders have learned it's much smarter to play safe with these tricky systems than risk the danger of callbacks and lawsuits when failures occur.

Everywhere the trend is toward stricter regulations. In county after county, health boards and building inspectors are raising minimum tank sizes from 500 to 750 gallons and asking for more careful soil tests.

Much of the impetus behind this trend comes from recent widespread distribution of a U.S. Public Health Service report on septic tank practice. The whole stress in the report is put on adequate percolation tests, including overnight saturation in several test holes. It recommends that tanks and tile fields be adequate to take the flow from garbage disposers and washers. This is sound advice. Even if your new houses are sold without these appliances, you can expect your buyers will soon add them.

Whatever current regulations are in your area, your best move is to get the PHS "Manual of Septic Tank Practice" by sending 35c to the U.S. Government Printing Office, Washington 25, D.C.

2. Maybe a one-house aerated tank will solve your tight soil problem

Several companies have brought out small complete treatment systems as an alternative to septic tanks where the latter won't work. Most are based on the activated sludge treatment method (see p. 119).

Your ability to use this system will depend on your health board's regulations. These plants are all new and not widely known. Most are still under development. FHA to date will not accept them as adequate treatment systems for houses it insures. Nevertheless, in some areas health authorities approve these plants and even encourage their use. In some cities you can discharge the tank's effluent directly into a stream or ditch; in others, it must first run through a leaching field.

The aeration plant described at right is Yeoman Brothers' Cavitett. Air drawn by suction to the tank's bottom mixes vigorously with sewage, reduces sewage parts by 70 to 80%. Cost: about $100 more than septic tank if no tile field is required. Another well known tank is Carl Boester's Sanitoi sewerless toilet (H&H, June '56).

3. Seepage pits are the answer in a few areas where they are permitted

A seepage pit is a septic tank followed by a cesspool. Some states permit them when absorption fields are impractical and where the top 3' or 4' of soil is underlaid with perous sand or gravel.

The pit capacity must be computed on the basis of percolation tests made in each vertical stratum penetrated. The percolation rate table suggested by septic tank systems is also recommended by the us phs for seepage pits, except that soil in which water doesn't drop 1" in over 30 minutes is counted unsuitable. The bottom of the pit should be 2' and preferably 4' above the ground water table. The effective area of the pit is its vertical wall. (Thus a pit 5' in diameter and 16' deep has an effective area of 251 sq. ft.)

Adequate tests for deep pits are difficult and expensive to make. Local codes vary considerably. Examples: Los Angeles requires brick lining. Fresno requires block lining. Phoenix requires no lining, and Sacramento requires the pits to be filled to the top with broken stones.
City sewers are worth an extra try

The very first step you should take—even before you buy a piece of land—is to find out what your area's sewer plans are. Pay a visit to your health or planning board, alone or with other builders. Learn everything you can about your present and future chances of offering your home buyers city sewer service, by far the best they can get.

Chances are you can help harried city officials in their usually thankless job of expanding sewers into the suburbs. They need the help of builders and land developers as much as you need their help. Today they are more and more often inclined to work with builders rather than against them.

Says James B. Coulter, chief of suburban sanitation studies for the US Public Health Service: "The home building industry can serve its own interest and be of inestimable service to the community by urging, demanding and sponsoring unified action toward sewerage planning. Perhaps the most important need in suburban sanitation today is for a sound master sewerage plan in every metropolitan center. Today only a few areas have such a plan. Only by close cooperation between builders and public authorities—as has happened in St. Louis, Louisville, Nashville and Pittsburgh, to varying degrees—can action be taken that will insure orderly development and suburban growth."

City sewers save money for you and your buyers

If you plan carefully and overlook no short or long-range chance to hook up to public sewers, chances are you will save yourself the cost and trouble of putting in risky septic tanks or tying up capital in community systems.

You also get a strong talking-point advantage over builders who don't offer city sewerage. Home buyers who get city sewer service when they move in are hundreds of dollars better off than if they don't get it for several years.

Here is some evidence you can use to convince your prospects of the value of sewers to them:

It usually costs three times as much to lay sewer lines in paved streets as it does to lay them at the time the roads and houses are built. The added burden on the home owner amounts to an average of about $5 per front foot of his lot. If he has a 100' lot, that means $500 out of his pocket when the city eventually extends sewers to his neighborhood.

You can take temporary steps to speed sewer service

Even if city sewerage isn't available at your tract now, you may have a chance to provide substitutes that will hasten sewer service, at little extra cost.

You may be able to arrange with local authorities to put in individual on-lot disposal systems on small lots if you put in "dry sewers" at the same time. This means a central collection system that remains unused until the city sewers are extended. In some areas, the arrangement includes an assessment against each house or each acre of your tract to pay for the extension of sewers to your site. All builders and home buyers in your area share in the costs and advantages of the plan.

Pressure mains may prove an economical temporary method, cheaper than dry sewers. This involves your installation of pumping equipment and temporary low-cost mains to carry the raw sewage from your tract to the distant city system. Depending on the distance, you might finance this alone or jointly with other builders. The cost depends in large part on how long you must operate the pumping equipment.

Long-range planning provides sewers in advance of new suburban houses

In Johnson County, Kan., on the outskirts of Kansas City, carefully made plans provide for stage development of public sewers and treatment plants. Each main sewage district has sub-districts like the one shown, all based on natural drainage basins. Trunk sewers are put in large enough to carry the future maximum load required. Temporary mains are replaced as other districts hook up.
Next Commissioner Mason plans to

DEBALKANIZE FHA PRACTICE TO COVER MORE APPLIANCES

In Pittsburgh, you cannot finance a range, clothes washer, clothes dryer, freezer, or garbage receptor under an FHA mortgage.

In Philadelphia, 294 miles away, in the same state, you can include them all.

In Grand Rapids, you cannot include an incinerator, dryer, range, refrigerator, clothes washer, kitchen mixer or water softener.

In Detroit, 143 miles away, in the same state, you can include them all.

58 FHA offices will include dryers in the mortgage, 16 will not; 66 will include ranges, 8 will not; 22 will include freezers, 52 will not; 14 will include window shades, 60 will not; 59 will include clothes washers, 15 will not; 10 will include room air conditioners, 61 will not.

Now that Commissioner Mason has cleared up the confusion over FHA income requirements (H&H, Jan.), he is turning his attention to this chaos.

On the next two pages you will find a mortgage inclusion table prepared for House & Home by the Washington office of FHA on the basis of a questionnaire sent to the 74 district offices. If there are errors in this table (and House & Home believes there are), the errors are due either to local offices telling Washington one thing and doing something different, or to policy changes made by some of the local offices since they answered the questionnaire. (For example, quite a few offices have just accepted room air conditioners as a result of the House & Home Round Table last fall.)

Actually the confusion is even worse than the table indicates, because 14 offices say they limit their acceptance of some (but not all) items to built-ins; the others accept the “intent theory,” which is now valid under the laws of 47 states. This makes free-standing units part of the realty if lender and borrower so agree in writing.

What to include is no longer a problem with many lenders. Almost all savings and loan associations from coast to coast and many other conventional lenders now finance without question not only appliances but many other items like shades, awnings, and wall-to-wall carpeting. Ever since 1950 almost all VA offices have included almost all appliances in their certification of reasonable value.
<table>
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<tr>
<th>Zone IV (continued)</th>
<th>Nebraska</th>
<th>North Dakota</th>
<th>Ohio—Columbus</th>
<th>Cincinnati</th>
<th>Cleveland</th>
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<th>Colorado</th>
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<th>Louisiana—New Orleans</th>
<th>Missouri—St. Louis</th>
<th>Missouri—Kansas City</th>
<th>New Mexico</th>
<th>Oklahoma—Oklahoma City</th>
<th>Tulsa</th>
<th>Texas—Dallas</th>
<th>Houston</th>
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<th>California—San Francisco</th>
<th>Sacramento</th>
<th>Los Angeles</th>
<th>San Diego</th>
<th>Hawaii</th>
<th>Idaho</th>
<th>Montana</th>
<th>Nevada</th>
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<th>Washington—Spokane</th>
<th>Seattle</th>
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Note: The table continues with more information about other states and their approval status for builders.
If a broad business background is what a man needs to head the National Association of Home Builders, Nels Greer Severin is the right man for the job. NAHB's new president has background to spare. He can apply experience from a dozen different fields to the problems of home building. As a successful auto dealer, for instance, he has used auto sales methods to sell homes. And in the home building industry itself, he is as well rounded as they come.

He learned first things first—how to use a hammer, saw, shovel and paintbrush. He has been building homes for 17 years—in several cities, in large tracts and small developments and for sale or rent. He has developed land in a big way—one of his projects has just won an NAHB merit award. And he's a big mortgage banker.

Just about the only thing Severin doesn't understand about the home building industry is how the NAHB happened to pick him as its president. "I guess I just came down the river like a piece of wood floating along and happened to be in the right place at the right time," he tells you seriously. "I didn't ask for the job, and I didn't work for it."

That's just it. He didn't work for the presidency, but he certainly worked for the NAHB. For years he has been active in local chapters in San Diego, where he lives, and in Los Angeles. He has been on NAHB's legislative committee seven years—was its chairman last year as well as NAHB's first vice president.
SNAPSHOTS
FROM THE
SEVERIN
ALBUM

1909 - Nels at 2 1/2, in his Sunday best

1914 - Nels at 7 in Kansas City

1925 - Julia & Nels on their honeymoon in Florida

1932 - On his way to California, Nels fixes a flat on his family car.

1936 - Nels with daughter Nancy, 2 1/2, in front of their home in San Diego

1949 - Slugger Nels takes a cut at the fall at an outing for his auto agency employees at Long Beach

1954 - Fisherman Nels with a big catch in La Paz, Mexico
Severin spent much of 1957 in Washington, most of the time on Capitol Hill trying to win votes for better housing legislation. This hard work impressed NAHB staffers, as did his organizational talent in getting key industry members all over the US to make the same kind of personal contacts with their individual congressmen.

On the West Coast, Severin is widely recognized as a top-flight organizer

He seems to have uncommon talent for picking competent men and getting them to work as a team. In fact, Nels willingly admits it.

"If I'm confident about anything," he says, "it's in delegating authority to other people."

In his various and widespread offices, his key people reflect this confidence. In part, this is because Severin reportedly gives key subordinates not only plenty of rein but salaries that match their responsibilities.

Thanks to having this kind of organization, Severin can take on his added NAHB duties with more confidence than most men could.

But Nels hasn't let a jam-packed schedule intrude on his family life

He and his wife, Julia—they've been married 32 years—are nearly inseparable, and she travels nearly everywhere with him. At home Severin spends what time he can reading (mostly novels and business papers) and listening to classical music. He likes an occasional drink (martinis with a lemon twist). Once a year he gets down to Mexico to try for marlin and sailfish in the Gulf of California. This is his one real hobby. When his daughter, Nancy Lee (now Mrs. Norman Wett) was growing up, he spent a lot of time with her.

"Nancy Lee was the boss," Nels says. "But the boss got married two years ago, and now the new boss is our granddaughter, Cynthia Lee. Cindy, for short."

Now 51, Nels is a trim 5'-10", greying at the temples, and a neat if not natty dresser. He is a restrained man with a quiet air of confidence. He has come a long way since his unsettled boyhood.

"As a kid," Severin recalls, "I was pretty much on my own!"

Nels Severin was born Dec. 11, 1906 "on a great big farm in Kansas." His father, John, had come from Sweden, only son of the only woman physician in Stockholm. His mother, Mary Jane, was born in a covered wagon when her Welsh parents were migrating west. John Severin was a wheat and stock farmer who had no lack of help—including five sons and five daughters. Nels was the tenth child.

"My parents were fairly old by the time I came along, and they were too busy to let themselves be bothered by kids. When I was very little, Father took us to Missouri where he tried his hand at running an auto livery, but eventually he went back to farming. He never got farming out of his system. Mother was the kind of person who liked anything Father liked, so she enjoyed every minute of life. She's the hardest working woman I'll ever see."

"As long as I can remember, I was shunted about from household to household"

From the time he got out of grade school, Nels spent most of his time at his married brothers' and sisters' homes and helped support himself. One summer he worked as a machine helper in a roundhouse in Wyoming. Another summer he was a soda jerk, another "worked my head off on a farm."

For a time it appeared he might settle in the bakery trade. He put in two summers selling bread and cookies door to door—did well at it, too. But this phase petered out when, as Nels puts it, "I went car crazy."

"I had three brothers in the automobile business, and one summer I drove cars from the factories to their showrooms—such makes as the Elker, the Grant 6, the National and a few Chevrolets. I loved cars. But then I loved music, too. I learned to play the banjo, and used to play in a band at school dances. And I sang in a choir."

Sports interested him as well. Swimming was his favorite but he did better on the track team, running 100 yards in 10.2 seconds and high jumping nearly 6'.

But even in those boyhood days, his main interest was in working

After high school, Severin went to business school at the University of Missouri, but only for a short time. He wanted a job. At 19, he went to Fort Lauderdale, Fla. and became a bank teller. The nicest part of that job was the girl who

continued on next page
worked at the next window. She was Julia Harris, also newly arrived from the Midwest (her parents were farmers in Illinois). Within a year Nels and Julia were married.

But promotion came slow in banking, and about 1929 the young Severins were back in the Midwest. Nels trying his luck as a hardware salesman in Illinois and Iowa. This too proved pointlessly slow. What's more, Nels and Julia found the harsh winters a little too much to take after Florida. So, in the depths of the Depression, they moved once more. This time they headed for the West Coast.

In southern California, Severin eventually found himself

By the time he got to California, where part of his family lived by then, Nels had had no small experience in several fields. But he hadn't settled on a career—and the Depression was not the time to be choosy. In short order, he worked as a parking lot attendant, sold real estate, collected for a building and loan company and even got another bank job. In 1940 he was selling autos.

Then Nels decided to take a crack at home building. In 1941 he went to work for his brother Earl, a struggling builder. For Nels this meant using a shovel, hammer or any other tool that needed a hand to wield it.

The brothers didn't get far during the war years. At most they built 20 houses a year, sometimes only five. But it was valuable experience. When the postwar boom came, they were ready for it. More so than most builders, for Nels' banking experience had taught him how to handle all-important money problems.

By 1947 the Severin brothers were building more than 300 houses a year

Earl retired in 1947, but his eager young brother was going full blast and couldn't let go. If he couldn't then, it's hard to see now how he ever can.

Though his starts have declined since 1955, when he hit 500, Nels still has plenty of business to keep track of.

He is still building about 100 houses a year on his own, plus several hundred in partnership with other builders.

And he is up to his elbows in other businesses, too. He owns 280 rental units and a shopping center in San Diego and is building another shopping center there. He is part owner of other rental units and shopping centers in San Diego and Los Angeles. He has large landholdings throughout southern California. He owns three auto agencies in Los Angeles. And he's a partner in putting up 250 Capehart Act military housing units in Honolulu.

Severin's mortgage bank business does about an $80 million volume and extends to Arizona and Nevada, where he's the state's top mortgage lender.

He keeps hopping about to eight offices between San Diego and Phoenix

With so many irons in the fire, Severin gets to spend little time with any company, uses some of his private offices only one day a month.

“My auto business is now mainly an investment,” he points out, “I am not greatly involved. People I have working for me know more about it than I probably ever will know.”

He became a mortgage banker years ago to finance his own developments. Now he handles such a big volume that his own houses account for little of the total.

When Severin talks about land development, he sheds some of his usual restraint. “I have terrific enthusiasm when I think what I can do with this or that piece of land when even a rabbit wouldn't be able to see a use for it.”

What are some of the things Severin thinks the home building industry needs most?

Builders must become better merchandisers, Nels says. For one thing, they must take a greater interest in trading.

“My auto training taught me a lot about merchandising and trading. I have traded more houses than anyone I know and that is an auto dealer's technique. Until builders know how to trade they can't do their job right.”

FHA can do more to help the industry, he believes, and this is something he will try to work on as NAHB president. “I think FHA has helped the home builders greatly. But I also think it has gone somewhat afield from its basic job. Today its land and building requirements are simply inflexible. They won't bend. I'm going to work on this problem.”

Severin is also strong on the value of using architects and thinks there should be better cooperation between builders and architects. Says he: “I myself don't always agree with my architects. Sometimes I have to make them bend their views. The sooner architects understand our problems, the sooner builders will use them. And we need more architect-designed merchant houses.”

Severin must know what he's talking about, for he and partner Irving C. Jordan have just won a NAHB “1958 Design Merit Award” for their Lido Sands tract of 82 beach houses at Newport Beach, Calif. “Handsome,” said the judges of the architect-designed houses like the one shown below. /END

STRIKING BEACH HOUSE is one of three models at award-winning Lido Sands, built by Severin and Irving C. Jordan. Entrance (left) opens into living room (right). Architects A. Quincy Jones and Frederick E. Emmons designed $15,750 models fit long, narrow seaside tract south of Los Angeles. Houses face boardwalk leading to swimming pool, other recreational facilities and ocean. Garages face bordering streets. Said judges: “Interiors very good . . . Architecture is fresh use of old forms . . . Pool is a big criterion for neighborhood.”

130 HOUSE & HOME
NEW NAHB OFFICERS are headed by President Nels G. Severin (center) of San Diego. Severin (see profile, page 127) was elected—unopposed—by NAHB directors to succeed George S. Goodyear, Charlotte, N.C. Carl T. Mitnick (second from right), Merchantville, N.J., who survived last-minute efforts to unseat him from NAHB's ladder of succession, succeeds Severin as first vice president. His victory puts him in line to head the 40,000-member organization next year. Martin L. Bartling (right), Knoxville, whose supporters waged an all-out, behind-the-scenes campaign to get him the first vice presidency, was elected second vice president. Other new officers: Treasurer Edward W. (Ted) Pratt (second from left), Royal Oak, Mich. and Secretary E. J. (Jim) Burke (left), San Antonio.

1958 NAHB CONVENTION REPORT:

WHAT YOU WOULD HAVE LEARNED
IF YOU HAD GONE TO CHICAGO

Chances are, you'd have come back with these three main ideas:

1. The big need is for better merchandising—all the way from creating desire for new homes to handling callbacks promptly and pleasantly.

2. Builders are pricing themselves out of the market. Leaders hammered on this theme. It was no attack on building quality houses. But it was a warning against overpricing the product by paying too little attention to cost-cutting techniques and letting low productivity and obsolete codes add as much as $1,000 to the cost of the average house. Said Economist Gordon McKinley of Prudential Insurance Co.: "A lot of builders are going to find themselves out of business if recent price trends continue."

3. In many areas, demand is growing for really low cost homes ($6,500 to $13,500, depending on the city). Said outgoing President George S. Goodyear: "There is a waiting market for 150,000 to 200,000 low cost homes if lenders will finance them."

These conclusions are borne out by this special report. To rush it into print (the convention was in session Jan. 19 through Jan. 23), a team of ten HOUSE & HOME editors worked around the clock in Chicago—listened in on every meeting, sat in on after-hours bull sessions, sifted what they found and wired fact-packed reports to New York.

For a quick rundown of their stories, see below (for the stories themselves, turn to the next seven pages).

Merchandising
What really makes people buy houses? (p. 134) . . . Ten tips to better selling (p. 135) . . . Other stories (pp. 134-5).

Building costs
How one builder saves $100 a house (p. 137) . . . Union Chief Gray does turnabout on his wage proposal (p. 138).

Legislation
What NAHB wants from Congress (p. 133) . . . State legislatures urged to okay 90% conventional loans (p. 133).

Markets
The switch is on to low-priced houses (p. 137) . . . Urban renewal offers builders a tempting new market (p. 136).

Design
Fireworks at design panel (p. 137) . . . Frank Lloyd Wright on prefabs (p. 138) . . . Builders say design is their biggest problem (p. 138).

Land planning
Now it can pay you even more to save trees (p. 136) . . . Expressway interchanges are breeding grounds for slums (p. 133).

Forecast for '58
Three economics experts see more starts, more money, no depression, quick end to present slump (p. 132).
Experts see more starts, more money, no depression

Despite recession, 1958 should see 1.1 million new housing starts. There will be $1 billion more mortgage money this year to finance them. The current economic slump shows no signs of developing into a major depression, and even the slump probably will not last more than another few months.

Those are the predictions of three economic experts who analyzed "what's ahead for 1958." They are: Commissioner Ewan Clague of the Bureau of Labor Statistics, Economics Director Edwin B. George of Dun & Bradstreet, and Gordon McKinley, Economic Research Director for Prudential Insurance Co. Their reasoning:

House building in 1956 and 1957 has just barely kept pace with family formation, permitting no effective attack on slums to upgrade the quality of US housing. Yet bigger families and the enormous increase in the incomes of middle and upper middle income families (who make up the big new housing demand) have produced what Clague calls "a backlog of need." He explains:

"By 1955, 20 million families, representing about 46% of the total, had incomes of between $4,500 and $10,000 compared with only 32% five years earlier. At the same time, median family incomes jumped 29% compared to only 5% rise in the consumer price index.

More children mean bigger houses

"Today, we are having three, four and five children. The big rise in family size is in the moderate and upper income groups that are home buyers. The steady trend toward larger, higher priced houses since 1954 has helped to provide [them] with accommodations suited to their growing family size and means. A large amount of this demand still exists."

As it did in the 1949 and 1954 recessions, the government is acting to stimulate home buying and boost the flow of mortgage money. Congress will get into the act soon, too. Indications are that costs may stabilize this year, which may persuade buyers they are getting more money's worth in housing.

Lenders will allocate about $1 billion more to residential mortgages because, says McKinley:

1. Commercial banks, faced with a lesser business demand during the next few months and with a steady growth in reserves, will move back into the mortgage market.
2. Some savings institutions, like savings and loan associations, will experience faster growth this year than last.
3. Life insurance companies will devote a bigger share of their investment to housing loans, less to industrial mortgages and business loans.
4. Interest rates on housing mortgages will drop little, but interest rates on industrial mortgages will probably drop more, giving a slight advantage to residential loans.
5. Proposals to woo pension-fund money into mortgages "will be pushed harder" and "some of these proposals are reaching the practical stage."

Money supply will outtrace demand

Lenders will have the $1 billion extra to allocate, predicts McKinley because:

1. Corporate demand for loans should drop about $2½ billion below the 1957 level.
2. State and local borrowing, fed by increasing governmental functions and also by deferred borrowing, will shoot up about $1 billion. (Item: over half of the $5.7 billion in tax-exempt local bonds authorized at elections last fall is still unoffered on the market.)
3. Consumer short-term borrowing is likely to rise $1 billion, following the postwar cycle of two years of leveling off and repayment succeeded by a year of steep rise.
4. Federal government will become a borrower of money—probably about $1½ billion.

Summing up: the demand for nonresidential borrowing should be up about $1 billion, but loanable funds will probably rise $2 billion.

Look for an upturn soon

The recession should be short lived (i.e., over by the end of the year) because, says George, ultimate sources of demand, like retail sales, have held up better than the indexes of prosperity like carloadings, inventories, manufacturer's new orders, production, business loans, and employment.

"I haven't got worked up over the business setback," says George. "Events so far are moving along a path that is compatible with a shallow recession. Personal income will stay near its peak."

Even more optimistic, McKinley foresees a turn in business conditions next month. He forecasts: "The recession will be milder and shorter than in 1949 and 1954. I call it the 'prosperous recession' of '58. I think the turning point will come in March. Then total business activity should start up. It should increase for the rest of the year and the rate of increase should go up the rest of the year, too."

No trend "back from suburbs"

The popular idea that there is a big swing back to the city from the suburbs was called "an absolute myth" by Philadelphia Builder Harry K. Mudway. "The so-called return to the city is just not borne out."
Here's what NAHB claims it wants

NAHB will ask Congress to cut FHA down payments still more. It will oppose President Eisenhower's plea that Congress stop forcing Fanny May to buy special assistance mortgages at par.

It wants the moribund VA program extended beyond its July expiration for World War 2 veterans, with flexible interest rates like FHA's.

NAHB directors, meeting in closed sessions, adopted these and a score of other major policy and legislative decisions during the convention. Items:

1. FHA down payments should be cut from 3% of the first $10,000 of value to 3% of the first $12,000, from 15% of the value between $10,000 and $16,000 to 10% of the value between $12,000 and $16,000, and from 30% to 25% of the value over $16,000.

2. Fanny May should have more treasury money to buy special assistance mortgages, at par. Congress should repeal the $15,000 limit in secondary market mortgage purchases.

3. Discount controls should be repealed because "they only serve to impede the flow of scarce residential mortgage credit."

4. Interest rates "should be set at the lowest level at which mortgage funds will be provided." Specifically, NAHB will back a boost in FHA rental housing interest, now pegged at 4½% by Congress. It will back FHA's just-announced position that FHA's 5¼% rate for its regular Sec. 203 program is high enough for now.

5. On conventional loan insurance: NAHB will support the US Savings & Loan League's plan to insure the top 20% of 90% loans—provided the plan is amended so all mortgage lenders can take part. New President Nels Severin adds: "This doesn't close the doors to our endorsement of HHH/Administrator Cole's plan (for similar FHA insurance on the top 25% of otherwise conventional 90% loans) later on."

6. On trade-ins: Congress should amend the law to let a builder or realtor close an FHA Sec. 203 loan in his own name in the full (and higher) amount available to an owner-occupant. The difference would be put in escrow until the house is sold to a new buyer. This would "eliminate costly duplication of closing costs."

7. On closing costs: FHA should amend its regulations to let closing costs be paid with an unsecured loan.

8. On a central mortgage bank: Fanny May should be expanded into "a true central mortgage facility through creation of an independent board of status comparable to the Home Loan Bank Board and Federal Reserve." The new facility should have power to lend money on the security of government-backed mortgages. Instead of requiring its users to buy stock with each loan sale, as Fanny May does, the central bank should require only that its users maintain a fixed ratio of stockholdings to loans placed.

More FHA reforms needed

NAHB scolded FHA and congress on two counts:

1. FHA must effectively transmit to its field offices its desire—as demonstrated in the recent modernization of credit examinations—for improved administrative procedures in all aspects of its operations.

2. An unrealistic approach to rental housing and the unavailability of mortgage credit on reasonable terms have kept FHA from performing its function of attracting into rental housing the long-term, low-yield investment which alone can produce moderate rents...

We must develop financial mechanisms designed to encourage rental housing in smaller projects suited for the needs of small and medium-sized communities."

Urban renewal got a strong endorsement, but, as usual, NAHB called for no more public housing.

NAHB shoots for a single code

Energetic Ernie Zerble of Mason City, Iowa who a year ago pushed successfully for more recognition for little builders, is now shooting at this ambitious target: unification of the nation's three major regional codes within three years.

Zerble's No. 1 tactic may prove remarkably effective. He plans to invite two experts each from the Building Official's Conference of America, the Southern Building Code Congress, and the International Building Officials' Conference to meet "two or three times a year" to work on code unification—at NAHB expense.

Zerble hopes to enlist aid of NAHB's 300-odd chapters to lobby code reform through state legislatures. No, I need, he thinks, is state enabling acts in many states to let municipalities adopt uniform codes by reference.

continued

LAND PLANNER FEISS

BUILDER BOSWELL

They say new highways threaten new wave of blight

New expressway interchanges will be centers of slipsided, uncontrolled, real estate development—even future slums—unless someone acts soon.

Planners and builders showed surprising agreement on this point at a panel on Highways, Housing, and the Suburbs. But no plans were made.

Washington, D.C. Land Planner Carl Feiss proposed that "no interchange or any part of the federal highway system be approved for financing and construction until it is related directly to a land use plan covering an area of at least two miles radius." He suggested that the government make no grants through the federal highway program in any metropolitan area unless it is related specifically to official local plans for all communities involved.

Edward H. Holmes of the Bureau of Public Roads pointed out that unregulated growth around interchanges means high-density growth, traffic on the highway becomes greater than expected, and congestion is not eliminated.

Washington Builder Harry Boswell said he would favor a plan for cooperation among planners, builders, highway engineers and city officials to insure orderly growth in areas opened up by new highways. When Feiss chided home builders in general for seeming to be "more interested in profits than planning," Boswell retorted: "The time has come for all of us concerned with urban growth to buckle down and cooperate, instead of blaming everyone else or preaching about what everyone else ought to do."
What you should know about people who buy homes

"Number one reason why women want a new home is a desire for cleanliness," reported Pittsburgh Merchandising Consultant Stan Edge. Edge interviewed 411 buyers of new houses in eight cities and found:

1. "People want a clean piece of mechanism in their basements—a new furnace. They are interested in new weatherstripping not just to keep cold air out but also to keep dirt out. Women want air conditioning to keep the house clean.

2. "On the average people shop 11 months before they buy a house. They look at 11 different houses, and they go back four times to see the house they buy before they make up their minds. So your salesman has four chances to make the sale, but he should try to close on the first visit if he can.

3. "Women want comfort in the house, but only if they can justify it to themselves. Don't sell an automatic garage door opener because it makes life easier, sell it on the basis that it keeps clothes dry on a rainy day.

4. "Strongest home buying motivations for men are tied to their love for their children. So talk to men about your good neighborhood and why it is good for their kids. Point out where children can play. If you have any open space nearby, tell about it. And talk about the schools.

Be sure to put out the welcome mat

5. "Young couples are timid about entering a strange house, so put out signs that clearly mark the model house and welcome visitors. See that your signs that clearly mark the model house and welcome visitors. See that your signs.

6. "Most families are scared to death of all the red tape surrounding home buying, so make home buying easier and less complex. Don't use words in your advertisements or your sales talk like escrow, mortgage, discounts or other phrases people don't understand.

7. "People are afraid of long-term mortgages, so emphasize the amount of the monthly payment, not the length of the mortgage. We found that two out of three women did not know how long their mortgages were for, so don't advertise it.

8. "Home buyers are also afraid of ridicule. Give a buyer good reasons for buying your house, so that when he goes to his office the next day and someone says 'Why did you buy that?' He can justify his purchase. One approach is to assure a customer that a lot of other families have also decided this house is a good purchase. Closely related to fear of ridicule is a common fear of making mistakes. If a young couple has an Uncle Joe who is a carpenter, you may have to get him to see the house and also sell him that your construction is good.

9. "Many people buy because they have a snob complex. Your house must be a symbol of success for those people. One Pittsburgh builder wrote his advertisement for $33,000 to $40,000 houses in French, because that is the snob language. It worked so well he sold 27 houses in 32 days.

10. "Women have different reasons than men for buying houses. A woman regards herself as a protector for her children and also for her husband. So she wants a house that lets her stand in the kitchen and see the children playing, and also watch over her husband. That is why the family room next to the kitchen is such a success.

Let them hide those dirty dishes

11. "Privacy is also important. You can't get privacy in many old neighborhoods, where houses are on 25' lots. People want divisions between houses, as you can tell by studying what people have done in old subdivisions. Families also want two living rooms and two baths for privacy. Have your salesmen demonstrate that there are several places to sit in your house, several places to talk and to eat. Don't forget women have a fear of guests coming in and seeing dirty dishes on the dining room table, so put your dining room out of sight from the front door.

"Other factors important in why people buy new houses include a desire to conform and to be in style, a basic desire for change and something new, and the reputation of the builder."

How to get prospects to make up their minds

"The salesman's problem is activating his prospect," Sales Consultant Harris Bigelow told builders at the merchandising short course.

"How can a salesman ask for the order without ruining his prospect? There are several ways to do it," Bigelow said. "He can ask for the order without saying so directly. He can say, 'Wouldn't this be a wonderful house for children?'

"Another way is to give buyers a chance to make a partial decision. They may not want to make a major decision, but they will partially commit themselves when a salesman asks them if they prefer this or that feature."

Bigelow warned builders that if their salesmen try only to motivate customers "and hope they will come back later," some blunt salesman for another firm may get the order by simply saying, "Why don't you buy it now?" He admitted that the Casper Milquetoast treatment may have to be given the hang-hang treatment: A direct order to "put your signature here.

He suggested builders feature brand-name products. "Manufacturers spend millions on merchandise features, but often builders don't use them to sell their houses. But you must plan how you will tie up such features with better living. Tell people how it will benefit them. Don't underestimate the motivation already done for you, and start closing the sale from the first minute."

Let utilities and product makers help you sell

"Builders can get a great deal of free sales help from utility companies and product manufacturers if they go after it," reported Chester S. Stackpole, managing director of the American Gas Assn. of New York City.

He told the merchandising short course that gas companies are now:
"... Sending women representatives to model houses to demonstrate appliances.
"... Providing gas equipment at low cost 'and sometimes no cost' for models.
"... Helping to plan press previews.
"... Offering help in writing newspaper advertisements."

CONSULTANT EDGE

other phrases people don't understand.

"Manufacturers spend millions on merchandise features, but often builders don't use them to sell their houses. But you must plan how you will tie up such features with better living. Tell people how it will benefit them. Don't underestimate the motivation already done for you, and start closing the sale from the first minute."
They give ten tips to more sales

“Merchandising begins when you select your land,” big California Builder Ray Cherry told a more-than-capacity crowd at the merchandising short course. “And merchandising shouldn’t stop,” he said, “until you’ve given the man who bought the house all the service he wants. We maintain a crew in the field to handle complaints, even if they are unjustified. This is the cheapest merchandising of all, because it can sell more houses than all your ads.”

Cherry, who builds $10,000 to $12,000 houses offered builders these tips on merchandising:

1. Keep your whole project neat and clean at every stage of construction. Prospects get their first impression from the construction site.

Don’t overfurnish your models

2. Sell from a furnished model. And furnish it yourself if possible. Furniture stores tend to overfurnish, so rooms tend to overfurnished. Don’t overcrowd at the merchandising short course.

3. Sell your area. During a tough market period we joined five other builders in the area sold almost nothing. We simply listed company names and price range. Our group to sell our area. We simply listed contractors to jointly sponsor advertising ads to steer prospects to your development.

4. If you’re not afraid of competition) send them to competitors.

5. Canvas the personnel department of nearby industrial plants for prospects. Both should be carefully designed.

6. At grand opening time, use all media. Remember that utility companies will often send your brochures to their mailing list, offer tie-in advertising and other cooperation.

7. Don’t let sales personnel high pressure prospects. Send them through the model and (if you’re not afraid of competition) send them to competitors.

8. Make sure your salesmen know every feature of the house cold. To make sure they do, we have all salesmen go over new models with the architect and construction superintendents.

9. Don’t skimp on advertising—spend what you have to spend. And don’t skimp on advertising—spend what you have to spend. And don’t run pictures, don’t run pictures, don’t run pictures.

10. Have an ‘operation move-in day’ for every family. Provide dinner, drinks, paper plates, etc.” Builder Nuckolls delivers a home-baked ham and champagne. He takes photos of the family’s first meal.

To keep the goodwill of last year’s buyers, invite them to a special preview of this year’s models. This starts them talking about your new houses, and keeps them out of the model house during busy weekends.

Here’s help on writing your advertisements

A list of do’s and don’t for builders’ newspaper advertising was presented by Robert Alandar, advertising director of the Charlotte Observer.

“Don’t delay handling complaints. The longer you put it off, the bigger the fault seems to the buyer—and he may think of other things to ask for.”

“Have an ‘operation move-in day’ for every family. Provide dinner, drinks, paper plates, etc.” Builder Nuckolls delivers a home-baked ham and champagne. He takes photos of the family’s first meal.

“Tell your story simply and appealingly,” advised Alandar. “Tell it often and tell it to as many people as possible. "Include the price of your house. If you don’t, you will cut down your prospects by 50%. And use the word ‘home’ instead of ‘house’. "Use facts as often as possible. Use brand names. Use endorsements of your buyers. Make your ad sound like you were talking. Keep your ad layouts simple.

“How to keep buyers sold once you’ve sold them

“A buyer who is kept happy after he signs the contract can be a valuable salesman,” builders were told by a panel of five builders: Irving Rose of Detroit, Fred Falander of Indianapolis, James Nuckolls of Tulsa, Marvin Warner of Cincinnati, and Jesse Baker of Corpus Christi.

“Get color selections and other choices in writing, and give a copy to subcontractors involved. Written forms reduce future misunderstandings.

“Before move-in day, go through the house with husband and wife. Make a list of things they want done, and do them before they move in. Get a signed statement that the house is OK.

“Have an itemized check list for your final inspection.

Are you losing sales to other industries?

“Builders’ biggest competition is not other builders, but other industries,” said Bill Underwood, chairman of NAHB’s merchandising committee, in opening the jam-packed merchandising short course.

“Two and a half million families considered buying a new house last year, but less than one million actually did. ... Today, people are spending only $12 out of every $100 income for housing: in 1907 they spent $22 out of $100.”

continued
Trees: with this equipment, it is easy to save them

If a tree on your land is in the wrong place, just move it. A new tree-moving machine cuts the cost as low as $7 for a tree 4" thick.

Past President Eddie Carr and a panel which included the editor of Trees, the director of the Morton Arboretum, the chief of horticulture for Washington parks, and the inventor of the tree-moving machine, revealed that:

"New tree-moving machines just coming on the market can uproot a fair-sized tree (6" to 8" thick), move it half a mile, and replant it all within 6½ minutes for as little as $7. Three men and a machine can easily transplant 20 ft trees 20' high in a day." (So far only 11 of these new machines have been sold. Cost of the attachment is around $11,000. The Morton Arboretum's machine paid for itself in savings within six months.)

"Trees can be moved almost as safely in midsummer as in late fall. What happens to the foliage after replanting gives early warning if special attention is needed to keep the tree from dying.

"Very large trees up to 45' high or 25" thick can be transplanted and saved for $85—not much more than the cost of cutting them down.

"Trees once transplanted are safer to move a second time because their root spread is smaller.

"Land owners in the path of city growth would be smart to start a small tree nursery on part of their property. Trees bought and planted very cheaply today will be easy to move in five years, and big enough to take the raw look off the development as houses are built. They will grow twice as fast if watered and fed.

"Beautiful flowering trees can be bought small for less than $1. With proper care they can be a great sales aid when replanted a few years hence.

"New homes on tree-shaded lots sell faster than houses on bare lots.

"Some trees can stand grading up around their roots as deep as 4"; others will be killed by 6" of dirt around the base.

"Oil and machinery damage kills more trees than transplanting. So does clearing away too much underbrush."

Why not try 220 & 221?

"A big market is waiting for builders in urban renewal. All of you ought to get in," says Developer Herbert Greenwald of Chicago.

The big bonanza for builders lies in FHA Secs. 220 and 221 created by the 1954 Housing Act to help house those displaced by redevelopment.

"A great deal of land will be offered during the coming year for residential construction in renewal projects," predicts Urban Renewal Commissioner Richard L. Steiner. It will range "all the way from large acreage tracts to single-family lots—calling for every conceivable type of construction."

"Profit opportunities in Secs. 220 and 221 are so good—despite cost certification which bars mortgaging out—that Builder Lewis H. Kitchen of Kansas City predicts: "In a short time. 220 and 221 will become even more famous than 608." Builders can expect to get their investment back in three to five years. says Greenwald.

Electrical news coming

FHA's new credit policy opens wide the doors to let far more builders profit by all the sales appeals of electrical living. House & Home Editor Perry Prentice told the electrical industry demonstration conference. Other news:

"Cheapest way to heat air conditioned homes in Florida, the Gulf South, and parts of California is just to reverse the cooling cycle and use the air conditioning unit as a heat pump"—William McGrath, chief engineer of Carrier.

"Waterless laundry may be on the market in a few years to remove dirt with inaudible high frequency sound"—R. E. Boian, manager Live Better Electrically program.

"A three-wire No. 12 perimeter split-loop is the best and cheapest way to provide adequate wiring for living and bedrooms."—L. E. Barrett, executive committee chairman, National Wiring Bureau. (See p. 160, also next, Sept. '56, Nov. '55.)

90% conventioinals?

Just introduced in the New York legislature is a bill to amend the state banking law to boost the maximum conventional mortgage from 80% to 90% of appraised value, boost maximum amortization from 20 to 30 years and raise the maximum loan from $15,000 to $25,000.

President George C. Johnson of Brooklyn's Dime Savings Bank said: "I am convinced a 90% 30-year conventional loan is sound and inherently safe."

Why? Explains Johnson: "The true test of soundness of a mortgage loan is not the down payment or length of term [but] the skill and ability of the lender to make a proper appraisal of the property and the borrower's credit."

Since 1934, the Dime has made 61,158 FHA and VA loans totaling $636 million, found it necessary to take over only 25%—or 0.42%. And the loans include "thousands" with no down payment or only 2% down.
Design panel produces fireworks

“We’re having this meeting to get cooperation, not to pull apart,” Tom Coogan warned the Better Design Means Better Business meeting, after verbal fireworks started on the questions:

1. Are architects of any use to a builder?
2. Does the minimum house make sense?
3. Why go back to traditional design?

“You architects talk big. I’d like to see you design a $12,000 house in my town of Savannah,” challenged a builder in the audience. Architect-Panelist Robert Anshen countered: “Duck soup. We’re building $2,500 now for under $12,000 on $1,500 lots with four bedrooms and two baths.” After more debate, Tom Coogan interrupted: “I guess builders know what people want, and architects know what people should have.”

Speaking of the minimum house, a member of the audience said: “We builders exist only as servants of the people. If people want $8,500 houses, we must build them.” Amid cheers from the audience, Anshen answered: “You don’t know what people want. So-called experts who cater and pander to what they think the public wants are usually wrong. There is no justification for building little houses with little windows; with them we have wasted land wantonly. Our neighborhoods are potential slums. I can’t let this philosophy of scarcity go unanswered.”

Traditional design provoked more argument. Coogan started it when he said: “I’m afraid we’re slipping from contemporary into traditional design.” “Why not?” came an answer from the audience. “Every once in a while people revert to softer design, like colonial,” said Architect Anshen: “Colonial is not soft, it is just surface treatment. People really want texture, good design, and the softness most of post-war design lacked.” Architect Robert Alexander of Los Angeles added: “You’re talking about romance in design, and I believe in it. Cinderella is one way, but the right way is with good design and romantic effects like reflecting pools, stepping stones and good landscaping.”

A builder in the audience summed up: “It’s a sad tribute to our society that everything else today is modern—TV, medicine, even our ways to kill a bug. Anshen is one way. but the right way is with good design and romance.”

Sales boom as builders switch to low cost houses

Scores of builders are switching to cheap houses.

The trend shapes up as one of the major market developments of the young year. Almost all say their sales range from good to wonderful. Items:

Past President Dick Hughes, confronted with a heavy inventory of unsold, completed houses, priced from $12,000 to $16,000, in Bartlesville, Okla, brought out two cheaper models: an 860 sq. ft., two-bedroom house for $8,200 with only $280 down, and a 1,000 sq. ft., three-bedroom model for $9,600 with $300 down (plus $200 closing costs). Sales shot up immediately, he reports, not only on the cheap houses, but also on the others.

In Seattle, Builder Al Balch is switching to production of a 960 sq. ft., $10,000 house on cheap land he bought more than five years ago. In San Antonio, Builder Jim Burke who had been building in the $10,000 to $11,000 market, added a house priced at $8,650. He says by advertising homes for as little as $60 a month, he can step up sales of a more expensive model costing $74 a month.

In Tacoma, Herman Sarkowsky switched from a $15,000 model to a three-bedroom FHA house priced at $11,590, reports sales “good.” In Augusta, Ga., Builder Jim Bible says sales are good on his 1,475 sq. ft. model priced at $11,950 plus land.

In Waterloo, Iowa, Builder Charles Mauser reports selling four $11,000 houses in a single week.

Robert J. Schmertz, New Jersey builder, says an $8,350 model tapped an almost unsuspected market among retired couples who already owned a house but wanted a smaller one.

In San Antonio, Builder Jim Burke who had been building in the $10,000 to $11,000 market, added a house priced at $8,650. He says by advertising homes for as little as $63 a month, he can step up sales of a more expensive model costing $74 a month.

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FLLW: why not prefab?

Frank Lloyd Wright's speech was an unexpected highlight of the convention. Introduced by Marshall Erman of Erdman Homes, Wright spoke on "Why not prefabation?"

"The machine—and what we call prefabrication is the machine—is the legitimate tool of our civilization. I have used the machine and not let it abuse architecture.

"Prefabrication has its limitations; it can take care of perhaps two-thirds of the modern house. So long as one-third is susceptible to individual treatment—living room, dining room, the sitting and relation to nature—then prefabrication can standardize and improve upon the elements of bathroom, heating, lighting, bedrooms, and kitchen arrangements. It can be taken directly to the job. Certain features of the house are not susceptible to individuality. But the total is; to bring prefabrication into the rest is just plain common sense.

The machine is the medium by which we'll realize the ideal house—a product of the study of nature and our own times. Till then, there is not a chance for a culture of our own.

"If we use the machine intelligently, and let it do what it is capable of, and give it intelligent work to do, we can reduce the cost of a house one-third."

"Merchandising is making the most of what you have where you have it." says George Goodyear.

Why Gray switched

President Richard J. Gray of the AFL-CIO Building Trades Dept. has withdrawn his now-famous proposal that union construction workers hold the line on wages this year (H&H, Dec.'57).

Gray told HOUSE & HOME that he withdrew the plan because of lack of support among his general presidents. But close associates of the labor leader said he retracted it after the presidents told him to retract or be fired.

As he retreated, Gray announced that he now supports the AFL-CIO resolution on collective bargaining (adopted at the December 1957 convention) which reads in part: "... we will press particularly for higher wages to bolster present inadequate consumer buying power and restore needed national economic growth."

But, for the record, Gray also told HOUSE & HOME he is still convinced the reasoning behind his wage moratorium proposal is sound. "Something has got to be done about costs," he said.

Gray said he is retaining one part of his proposal. It calls for an industry-wide committee to study methods of increasing labor productivity. The idea was to be presented to a meeting of the union's general presidents in Miami Beach on Jan. 27.

NAHB would cooperate in such a committee, "if established in a reasonable and fair manner." Earl W. Hortor, chairman of the labor committee predicted.

How to design better

"Design is our biggest problem," Leland Lee of Dallas told small volume builders.

Builder Jack Worthman of Fort Wayne had specific answers: 1) more curb appeal and landscaping; 2) simpler roofs; 3) subtler colors. "If we spent one tenth the time with design that Detroit does with automobiles, we wouldn't be in competition with them."

Rudard Jones, head of the Small Homes Council, had more suggestions: 1) bigger bedrooms (at least 9'-6" for a bedroom with a double bed, 18' x 9'-6" for twin beds); 2) proper zoning of quiet and noisy areas of the house (keeping the living room between the bedrooms and the family room); 3) good orientation to the sun (put most rooms along the south wall, keep east and west elevations to a minimum).

"Most important," said Jones, "be sure you can get the furniture you want into the house, and give it plenty of room." Jim Nuckolls, 25-a-year builder from Tulsa, suggested builders follow his example to cut costs with a standardized plan. Nuckolls has one basic plan, arranged so he can add rooms easily. He covers a $23,000 to $50,000 price range with essentially the same plan.

"Design is our biggest problem." says Leland Lee of Dallas.

"Why not prefabrication?" asks Frank Lloyd Wright.

"Most important," says Jim Nuckolls, "be sure you can get the furniture you want into the house, and give it plenty of room."
What did these top builders* 
go all the way to Savannah
to see and find out?

* From St. Louis: Fischer & Frichtel's Ed Fischer. From Houston:
  J. S. Norman Building Co.'s Mickey Norman. From Cincinnati:
  Warner-Kanter's Bill Chronis and George Lockwood. From Lincoln,
  Neb.: Strauss Bros.' Jim Strauss. From Odessa, Tex.: Beck Construc-
  tion Co.'s Ott Cloud and Dee Stevenson. From Dallas: Leland Lee,
  Harold F. Smith, J. D. Brown and Fox & Jacobs' Ike Jacobs. Their
  total yearly volume: 2,200 houses.

For an eye-witness answer
by HOUSE & HOME'S Ed Birkner, turn the page
Fastest US builder turns bare slab

What's the rush?
With that question on their lips, 11 top home builders went to Savannah, Ga., recently to see what makes the fastest builder in the business tick.

Speedy Builder Clayton Powell—he puts up most of his houses in 14 working days—fired back a succinct answer. Said he: "It's simple arithmetic. The longer you take to build a house, the more it costs you."

Then Powell, who builds only four houses at once (limits his starts to 80 a year), ticked off five reasons why his fast operation pays off:
1. "I save on direct labor. The less time your men work on a house, the more houses they can build in a given time. I need only 14 men on my building payroll."
2. "I save on supervision. I need only one supervisor because it's easy for one man to stay on top of only four jobs at a time. He has no trouble preventing errors and anticipat-

Fast Builder Powell gets off to a fast start—his four-man framing crew uses panels and trusses

8 AM Men and wall panels arrive at site.
8:20 AM Trailerload of trusses arrives.
9:10 AM Wall panels are raised on slab.
into finished house in only 14 working days

ing the kind of problems that boost costs."
3. "I get better control of men and materials. With only four houses in the works at once, it's easier to coordinate materials, direct labor and subcontractors."
4. "I save on construction financing—can borrow building money over short terms."
5. "I tie up less capital. The faster I build a house, the faster I can sell it and get my money out."

"Sounds fine, but how do you build so fast?" asked visiting Builder Ike Jacobs of Fox & Jacobs, Houston, a fast man in his own right (his houses go up in 28 days).

Said Powell: "Two things do it. First, the schedule itself. We live by it. Second, components. We don't build houses... We assemble them from components we buy." Powell owns a half interest in Components Manufacturing Co.

"How do you get your local FHA office to go along with your tight schedule?" asked Ed Fischer of Fischer & Frichtel, St. Louis.

"I don't," said Powell. "I stopped building FHA six months ago because inspection delays fouled up my schedule — our FHA office is as understaffed as any. But if I could get inspectors when I need them, the same schedule would work for FHA-insured houses."

"Why not include the slab in your 14-day schedule?" asked Mickey Norman of J. S. Norman Building Co., Houston.

"Because the weather might give me trouble," said Powell. "I always make sure I have enough slabs ready to stay ahead of my schedule."

"You're a fairly big builder," said Leland Lee of Dallas, chairman of NAHB's Small-Volume Builders' Committee, but how about the little guy?"

Said Powell: "The fast-building principle applies to any builder, whether he builds 10, 20 or 100 houses a year."

**to close in a house by the end of the first day**

11:30 AM Roof trusses are set on walls.

2:30 PM Sheathing is nailed to trusses.

4:30 PM House is completely closed in.

*For what happens on the next 13 days, turn the page*
Powell sticks to a tight schedule that puts the right men in the right place at the right time.

1st day: House is under roof. Then...

4th day: While two carpenters continue outside jobs, heating contractor takes over inside (light area)—installs heat duct in furred-down area over bedroom corridor. Carpenters build forms for porch, walk and driveway. Powell schedules work to keep all men busy all the time.

5th day: Electrical inspector checks wiring inside house (light area) while two brick masons and two laborers work outside. Masons start to veneer house while laborers grade between forms for walks and driveway. Electrical inspector knows Powell follows tight schedule, always arrives on dot.

8th day: Two dry-wall men are joined inside by tilesetter. Dry-wall crew has finished bathroom, freed it for tile man. Powell uses mastic instead of mortar to set tiles—says: "It's neater and faster, and joints don't crack if walls are straight and you use a good grout."

9th day: Two dry-wall men and two skilled carpenters work inside; two more carpenters work outside. Inside carpenters do not conflict with dry-wall crew but follow it through house—applying trim around windows and installing prehung doors. Outside carpenters hang garage door.

12th day: Painter and decorator work inside—have house to themselves and don't have to work around anyone. Powell, who hopes to cut his present 14-day schedule to 10 days, says: "An economical and satisfactory finished wall is the building industry's most important single need."

13th day: Flooring contractor works inside; two painters and two laborers work outside. Floor man lays finish floor (Powell uses wide variety of tiles, is also increasing his use of carpeting). Painters finish-coat preprimed soffits and cornices. Laborers grade yard and plant shrubs.
2nd day: Carpenters move into house to build partitions. Four-man crew (two carpenters, two helpers) assembles precut lumber—works smoothly in one big room created under roof trusses. Powell uses panels between house and attached garage but prefers precut studs for other partitions.

3rd day: Electrician works inside (light area) while two carpenters and plumber are busy outside. Electrician wires house. Carpenters install prebuilt soffits and cornices. Plumber puts vent stack through roof. Three different trades are separated, do not interfere with each other.

6th day: Four-man dry-wall crew starts work inside (light area); three roofers and two brick masons work outside. With partitions built and electrical inspection out of the way, dry-wall crew has interior of house to itself. Roofers lay shingles (asphalt or wood) in less than a day.

7th day: Two dry-wall men continue work inside (light area) while two-man concrete-finishing crew begins work outside. Dry-wall crew starts taping joints. If all gypsum has not been hung, two more dry-wall men come in to finish job. Concrete finishers pour and smooth drive and walk.

10th day: Two dry-wall men, two carpenters, heating contractor and plumber work inside without confusion. Dry-wall crew sands joints. Carpenters hang prefinished kitchen cabinets and install heat vents. Heating contractor installs furnace. Plumber installs fixtures.

11th day: Decorator, painter and electrician work inside. Painting time is cut down because paneling and cabinets are prefinished and acoustic tile is often used on ceilings (this also saves day of dry-wall crew's time). Electrician hangs light fixtures and hooks up built-in appliances.

14th day: Two carpenters and one laborer work inside; third carpenter and second laborer work outside. Inside carpenters install base moldings and folding doors on closets. Outside carpenter hangs screens. Laborers wash windows, floors and sinks and burn debris to ready house for buyer.

Three scheduling tips by Powell

1. Schedule everything. Don't start a house until you've listed all the materials that go into it and around it—from bricks to bathroom fixtures, from appliances to plants.

2. Be realistic. Make sure you really know how long it takes to do a job. If you ask the impossible, you'll only irk your workmen and subcontractors.

3. If a house falls behind, treat it as a "stepchild." It's easier to reschedule it than to try to force it back onto the original schedule. But be sure to find out why it's off schedule and correct the error. Example: fire a subcontractor who fails to perform as promised.

To see how Powell uses components, turn the page
PREBUILT PARTS of house—stacked on foundation slab and trailers—include wall panels, roof trusses, cornice components, soffits.

"I build with components, but these standard parts

"If I could use components for every single part of a house, I would."
That's what Clayton Powell told the top builders (page 139) who came to see his latest operation. He added:
"Components work for two reasons: they are made to standard dimensions in a factory and they reduce the list of materials you need on the site. What's more, they give you the advantages of prefabrication without the drawback so many builders and buyers fear—loss of individuality."
Here are three features of Powell's system:
1. Exterior wall panels are really post-and-beam-type panels: the junction of any two panels forms what amounts to a 4x4 post without intermediate bearing studs under the double 2x6 beam. Each panel (see bottom, opposite) has two girts (horizontal bridging) to which interior gypsum and exterior siding are nailed. This means the gypsum has to span 4" more than FHA's 24" minimum. "But," says Powell, whose system is awaiting FHA approval, "girts give the wall greater lateral strength and permit more horizontal nailing of gypsum to framing."
2. Panels are designed on an exterior 4' module. Powell switched from an interior to an exterior module because:
don’t cramp my style"

a) it’s easier to build a slab to even inches; b) roof framing works out to even inches; c) exterior siding like board-and-batten and grooved plywood can be used without waste on the outside. Says Powell: “Sure, you waste some gypsum on the inside, but that’s the cheapest material to throw away.”

3. No blocking is necessary to secure windows (44 1/2” wide and pre-glazed) in panels. Instead they are nailed directly to girts and studs.

Like Bob Schmitt of Berea, Ohio (H&H, Jan. ’57), Powell frames some walls conventionally to meet buyers’ special demands: “You’ve got to be flexible in today’s market.”
NEW WAYS TO BUILD BETTER
A monthly report on home building ideas, products and techniques

BETTER WIRING SAVES MONEY for you and your customers when it follows the recommendations of H&H's Round Table. For an account of a recent demonstration turn to page 160.

A SHOPPING CENTER FOR HOUSES helps turn furniture shoppers into home buyers, home buyers into appliance buyers. See how on page 168.

A NEW IDEA FOR YOUR SPLIT: Build in front and back stairs to give your plan two-way circulation. Frank Robino shows how on page 172.

17 BORROWABLE IDEAS from top-flight builders across the nation make up this month's "What the leaders are doing." See page 168.

DO YOU DEVELOP YOUR OWN LAND? If so, you'll want to see the latest in earthmoving equipment. Turn to page 179.

POWER TOOLS REPLACE MEN. Some of the new entries among hand power tools are seen in this month's round-up of tools and equipment, starting on page 178.

PRODUCTS OF ALL VARIETIES are found every month in H&H New products section. This month it starts on page 178.

THE LATEST TECHNICAL DATA is reviewed every month in the Publications columns. You'll find them starting on page 198.

SIX RULES FOR A SAFE DEVELOPMENT were uncovered in a study of Los Angeles tracts. You can use these rules right now. See page 204.
K&M Shingles add power to your sales pitch!

Low-cost K&M Asbestos-Cement Siding and Roofing Shingles arouse prospect interest at first glance. Styled in a wide range of modern colors, they're loaded with eye appeal. They're also tough, durable and practically maintenance-free. K&M Asbestos-Cement Shingles won't burn, rot or corrode. Never need protective painting. Silicone-treated K&M Siding causes dirt-bearing water to "ball up" and roll off.

You have the advantage of offering a known "name" brand to highly brand-conscious prospects. Extensive national magazine advertising has built confidence in and recognition of K&M Asbestos-Cement Siding and Roofing Shingles among millions of prospects. Their confidence gets an extra boost from the Good Housekeeping Seal of Approval that K&M Shingles have earned.

And K&M Shingles give you extra profits. They're low in first cost. Easy and economical to install. K&M Siding and Roofing Shingles are made of asbestos fibers joined with portland cement. Or, you may prefer to combine K&M Asbestos-Cement Siding with high-quality, durable K&M Asphalt Roofing Shingles.

For more information, see our catalog in Sweet's Light Construction File. Your building supply dealer has K&M Shingles. Put them on your materials list now.
What makes this lockset
the standard of comparison for value?

Styling that brings exceptional “buy appeal” to the new home you build... *precision engineering* that saves you installation time and assures positive security for the homeowner... *quality materials* that result in long life and troublefree performance with no “call-backs”... *competitive price* that keeps your cost down... these are the factors that determine value in a lockset. These are the features that make NATIONAL LOCKset the standard of comparison throughout the trade. Ask your building material supplier.

Specify it with confidence... Install it with pride

NATIONAL LOCK COMPANY

ROCKFORD, ILLINOIS  •  MERCHANT SALES DIVISION
B & G Hydro-Flo

...the finest in living comfort for homes

LOW-COST, PRACTICAL ZONING AN OUTSTANDING FEATURE...

One zone system
While only one pump is used in this system, a two-zone effect can be achieved if desired. The balancing valves installed in the return lines from the two piping circuits can be adjusted to maintain either a uniform temperature throughout the house or to provide different temperatures in two different sections of the house.

Two zone system
By introducing a second pump, completely automatic temperature control in two zones is effected. Each zone pump is controlled by a thermostat which permits the occupants to vary the temperature in the respective zones as desired. The piping varies from the one zone system only in the return connections to the boiler.
Why penalize your homes with inferior comfort equipment when it’s easier to sell the best? A B&G Hydro-Flo System adds genuine distinction and sales value to any home...offers all the immediate and potential advantages which only circulated water can provide.

Money can’t buy finer, yet the benefits of the B&G Hydro-Flo System are within the cost limits of the modest home. This system offers not only the best in heating but an option of such additional features as summer cooling, snow melting and zoning. These features can be included originally, or added when the owner’s budget permits.

The basic B&G Hydro-Flo System enriches a home with radiant warmth...warm, draftless floors...uniform temperature...superior heating by any standard! Plus a limitless supply of hot faucet water, economically heated by the same boiler that heats the house.

The growing popularity of split-level homes and the need for zoning their heating systems gives added value to the easy zoning characteristic of the B&G Hydro-Flo System. The boiler detail sketches below show how simply a home can have the temperature control and fuel economy of a zoned system.

**ONLY Water OFFERS ALL FIVE**

**SYSTEM in every price bracket**

The basic B&G Hydro-Flo System enriches a home with radiant warmth...warm, draftless floors...uniform temperature...superior heating by any standard! Plus a limitless supply of hot faucet water, economically heated by the same boiler that heats the house.

The growing popularity of split-level homes and the need for zoning their heating systems gives added value to the easy zoning characteristic of the B&G Hydro-Flo System. The boiler detail sketches below show how simply a home can have the temperature control and fuel economy of a zoned system.

**THE B&G BOOSTER PUMP**

The key unit of a B&G Hydro-Flo System is the Booster Pump. This electric pump is used to circulate water for heating the house in winter, cooling it in summer and for snow melting panels.

The B&G Booster and auxiliary Hydro-Flo equipment can be installed on any hot water heating boiler. A majority of boiler manufacturers include Hydro-Flo units as standard equipment on their “package” boilers.

Quiet, vibrationless operation and long-lived dependability are the outstanding characteristics of the B&G Booster. Over 2,000,000 of them have been installed to date!

Get the complete story—send for color illustrated booklet.

**Bell & Gossett Company**

Dept. FD-10, Morton Grove, Illinois

Canadian License: S. A. Armstrong Ltd., 1900 O'Connor Drive, Toronto 10, Ontario
Build for HER and sell more homes!

Most builders are men, but they should never forget that SHE is the one who usually has the final say in the selection of a home.

And surveys prove convincingly that women have a definite preference for oak flooring. They like the beauty, warmth, permanence, sanitation and easy maintenance of oak floors.

Too, women appreciate the fact that regardless of their tastes in furniture, rugs or wallpaper, contemporary or traditional, it's easier to decorate a home with oak floors.

Please HER, Mr. Builder, by installing Cloud's Lockwood Oak Flooring and you'll get more home sales, more quickly!

CLOUD'S
Lockwood
OAK FLOORING

LOCKWOOD has Nail Groove Feature. Saves time...positions nail...provides seat for nailhead.

LOCKWOOD has Snap Side Match and Tapered End Match. Help flooring lay up readily...final match firm, squeak-free.

LOCKWOOD has Precision-Milling! Minimum of sanding!

LOCKWOOD has Splinter Clipper. Annoying chip or spur eliminated to save you valuable labor time!

LOCKWOOD has Uniform Color. From famous oaks of Ozarks! Richer, more beautiful!

SEE YOUR LOCAL DEALER

QUALITY OAK FLOORING SINCE 1926
NOFMA CERTIFIED OAK FLOORING

CLOUD
OAK FLOORING CO.
SPRINGFIELD, MISSOURI

WOOD FOLDING DOORS
One Exclusive Franchise
Available in Each Open Market

Unusual Growth Distributorship Offered
In Distinguished, Highly Profitable
Business With Secure Future

The leading manufacturer in a dyna-
mic young, but proved-by-success
national industry, has a single pro-
tected franchise in each open area
for individual or group able to meet
highest qualifying standards.

During the past few years, we
have selectively built up a national
organization, providing a field sup-
sport team to train our distributors
and provide continual assistance at
test levels, including company-paid
advertising and publicity. Their suc-
cess is documented.

Today, there are only 29 remain-
ing “blue-chip” distributorships in
the U.S. No franchise fee is required.
If you are qualified by reputation
and experience, a low five-figure in-
vestment is sufficient to establish
you in this solid business with an
unlimited future.

Why Your Business Will Be Secure,
Competition Negligible

You will be part of a dynamic in-
dustry, whose sales already register
high in the millions. You will be rep-
resenting the Number One company
in the field, the International Swim-
mimg Pool Corporation, and enjoy
the full impact of a national brand
known to every man, woman and
child . . . a name synonymous with
swimming pools.

Our product, Esther Williams
Swimming Pool for homes and mo-
tels, capitalizes on the name, per-
sonality and sales appeal of this
great swimming celebrity, through
whose personal efforts it is now pos-
sible for people of ordinary means
to enjoy what used to be a rich
man’s luxury.

You will be demonstrating and
selling the first great advance in
swimming pools in twenty years. The
Esther Williams pool is all concrete,
in-the-ground, beautifully designed
with complete top-quality equip-
ment. Easy to sell, simple to install,
fully guaranteed. It offers exclusive
safeguards, including a safety ledge
and strong safety cover. Unique
water-saving filter recirculates
water, giving it diamond sparkle.
The pool carries both Good House-
keeping and Parents’ seals, assuring
public acceptance. Available in sev-
eral sizes, it is priced within the
budget of most homeowners and
financing is easily available. Nation-
ally advertised on TV, Radio, in
Life, Better Homes & Gardens,
Good Housekeeping and other pub-
lications.

If you need further proof, let us
send you the names of a representa-
tive list of our distributors. Check
with them on their present success
and future prospects.

As growth potential is great, we
can consider only correspondingly
successful businessmen. Technical
knowledge in field of general con-
tacting advantageous but not es-
tential as standardization simplifies
the pool construction. Annual serv-
vice contracts provide continuing
income.

We will appoint distributors in
open areas at once as the first sign
of Spring will heighten consumer
demand. (Dealerships also avail-
able.) Write today outlining your
qualifications. Address President,
International Swimming Pool Corp.,
135 East Post Road, White Plains,
New York.
WHAT...MUNTINS THAT SNAP IN AND OUT?

To speed window cleaning or painting, PELLA CASEMENTS now have muntins that can be easily snapped in and out! They are held securely to the sash by hidden ball-and-socket connectors, and their position between the exterior glass and interior dual glazing panel protects them from the elements. This optional removable feature is available in both regular and horizontal muntins, lending a traditional appearance to the window while offering the convenience of an unobstructed pane of glass.

Other new features of these wood casements include a narrow, 4 5/8" over-all frame, continuous cove at head and sill for composite groupings, and a new wood operator sill. The ROLSCREEN, with its convenient window shade action, has a new, simplified catch.

The steel frame, which makes the PELLA CASEMENT an exceptionally rugged unit, is, of course, retained.

For news of design improvements on all PELLA WINDOWS, see our catalog in Sweet’s or fill out and mail coupon today.

WOOD CASEMENT WINDOWS

ROLSCREEN COMPANY, Pella, Iowa Dept. J-32
Please send your 1958 catalog of PELLA CASEMENT, MULTI-PURPOSE and TWINLITE WINDOWS.

Firm Name
Address
City Zone State

ATTENTION MR.
FOR THE ARCHITECT OR DESIGNER: new, slim joining mullion provides the advantage of attractive horizontal lines.


FOR THE HOME OWNER: The "double-hung" look with all the conveniences of modern awning windows.

Composed of a fixed window at the top and a ventilating unit of equal size at the bottom, PELLA TWINLITE is available in seven modular sizes, including 32" x 44" frame widths. In addition a picture window in combination with a ventilating unit is also available.

Features like these are standard equipment: self-storing screens, in-the-sash storm panels, underscreen operator with exclusive Glide-lock, and complete weatherstripping. And!...they can be installed on their sides to form beautiful casements with narrow mullions.

For complete details, check and mail coupon today.

ROLSCREEN COMPANY Dept. J-31, Pella, Iowa
Please send detailed literature describing Pella's new TWINLITE combination fixed and ventilating windows.

Name
Address
Company
Title
City Zone State
Adequate wiring now costs little more than outmoded wiring

"Many houses could have adequate wiring for a little more than today's average cost of inadequate wiring."—Wiring Round Table report (H&H, Sept. '56).

Last November, the National Electrical Manufacturers Assn., the Electrical Assn. of Detroit and the Wake-Pratt Construction Co. teamed up to wire a demonstration house following many of the Round Table recommendations. The results released by NEMA and EAD (and charted above) show that available capacity for lighting and plug-in equipment can be increased by 180% for only a 21% increase in cost. And labor costs probably would have been lower if the electrical contractor had more experience with the system and equipment used, hadn't run into unexpected installation problems.

Why is a big increase in capacity desirable? Because consumption has been doubling every 10 years. In 1937, the average household consumption was 805 kwh per year; in 1947, 1,438 kwh; in 1957, 3,164 kwh; and by 1968, predicted usage is 7,000 kwh. More appliances, new types of heating and cooling equipment, and other future developments will require higher capacity wiring systems. Says NEMA house-wiring expert John Bigge: "If (adequate) systems are installed initially, they can be expected to save the owner hundreds of dollars of additional wiring expense by the time the mortgage is paid up."
Three-wire split perimeter loop is key to the big increase in capacity

This type of wiring loop (perhaps the most important Round Table recommendation) provides the house with twice as many circuits for lights and plug-in equipment as a loop of conventional wiring. How? Each three-wire No. 12 cable (two "hot" wires and a ground wire) carries two 20-amp circuits; so there are two separate circuits (totaling 40 amps or 4800 watts) available at each duplex receptacle (see diagram at right). This is 2.67 times the 15 amps (1800 watts) provided by conventional two-wire No. 14 cable. And a three-wire cable can supply 240 volt power for air conditioners or heat pumps (see diagram, right). With conventional wiring, installing a 240-volt appliance means rewiring.

Switched outlets are provided by using one of the hot wires to a duplex receptacle as a switch leg (see diagram above). In the wiring diagram there is a code violation: one kitchen circuit supplies a living-room outlet, and living room circuits supply a kitchen outlet. But with so much capacity, this is safe and efficient, according to the National Electrical Manufacturers Assn. and the Electrical Assn. of Detroit.

THREE-WIRE CABLE provides two 120-volt circuits, 240-volt power

continued on p. 164
John Hass likes Bildrite best
"Two men can close in a house in 6 hours," says Hass

Around Hyattsville, Md. (near Washington, D.C.), Hass & Carson are known as builders who never put up a "cheap" house. Yet hundreds of their homes have sold for less than $14,000; and today the price range is $14,650 to $15,850.

John Hass, who bosses construction for the firm, says sheathing is a key item, both for strong, snug, solid walls and for really important cost savings. And for 14 years... since the first year he started in business... Hass has used nothing but Insulite Bildrite Sheathing.

"We use 30 sheets of 4' x 9' Bildrite and 8 sheets of 4' x 8', on an average house," says John Hass. "Just stack it by the foundation; never have to worry about rain hurting it. As your picture shows, we use almost every cut-off piece to fill the areas on gable ends. Bildrite cuts easy, nails up perfectly, makes a strong, warm, wind-tight wall, and leaves almost no waste. Best of all, two carpenters can close in a house completely in 6 hours."

Want to speed up your building... reduce waste... and add more strength and insulation without extra cost? For facts on Bildrite Sheathing, write us—Insulite, Minneapolis 2, Minnesota.

4' x 9' size avoids "piecing out." in vital sill area between foundation and sidewall. One man can easily lift, carry and nail a big, light 4' x 9' Bildrite panel. Applied, it makes a solid, tight, strong insulating shell from cave line to top of foundation.

They sell like hotcakes, at around $15,000; and typical Hass & Carson home features 3 bedrooms, living room, dining room, kitchen, wall oven, entrance handrails, broad concrete driveway. Small, highly-trained H&C crew enjoys steady work the year around.

build better, save labor, with

INSULITE

Bildrite Sheathing

INSULITE, made of hardy Northern wood. Insulite Division of Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota.

INSULITE AND BILDRITE ARE REG. T.M.'S, U.S. PAT. OFF.

FEBRUARY 1958
Push-in type wiring devices save labor time

The wiring devices used in the demonstration house provide two major advantages: 1) they're faster and easier to install than conventional devices, and 2) they'll probably never have to be replaced.

The devices are the push-in or pressure-lock type. The electrician need only strip and insert the wires in the holes provided to make a tight, lasting connection. No time is consumed bending wires with pliers and tightening outmoded screw terminals with a screwdriver.

The wiring devices used in the house are “specification grade,” have a U-type slot for plug blades so that each blade makes firm contact on both sides. In “competitive grade” devices the blade makes contact on only one side so that the device operates with more heat and less tension, increasing the frequency of arcing. The arcing in a “competitive grade” device can use up contact metal in a relatively short time, making it necessary to replace the device at a labor cost of at least $2.

Non-metallic sheathed cable minimizes wire cost

Installed cost of non-metallic sheathed wiring (like the Romex shown in photo, left) is about 15% less than armored (BX) or any kind of conduit, the Round Table reported. But backward codes and restrictive practices still make something like one house in four pass up the economy of non-metallic sheathed cable.

In the demonstration house, No. 12 cable was used instead of the usual No. 14. No. 12 carries 33% more current for only 20% more material cost than No. 14. The smaller wire, adequate a decade ago, requires too many small circuits to meet today's much greater current demand.

The extra cost of the No. 12 three-wire cable may come down too, if enough people use it. Howard Stevenson of Detroit Edison, puts it this way: “If all homes use three No. 12 conductors instead of the present conglomeration of conductors (three 14's, two 14's, two 12's, two 14's with a ground wire, etc.) manufacturers can possibly do something with the price of their product.”

Distribution panel cuts need for single main switch

In the demonstration house, handle ties are used on pairs of circuit breakers, so all service can be cut off with four motions of the hand (codes specify a limit of six hand motions). But breakers will trip independently when one of the two circuits in a three-wire cable is overloaded. This assures no blackouts (the other circuit will still feed some lights in every room), and complies with the code while eliminating the need for a main switch. If handle ties were not used, a main switch (cost: $6 to $60) would have to be placed ahead of the distribution panel.

Ideally, with the kitchen close to the main panel, no subpanel would be required for the kitchen circuits. In the demonstration house, however, the GE unit kitchen came complete with subpanel.

The two 50-amp breakers on the distribution panel (left) serve this subpanel that feeds three extra lighting and plug-in circuits in the kitchen area. With the four circuits shown at left on the main panel, these make up the total of seven light and plug-in circuits for the house.
And the demonstration house used three different surface raceways

Baseboard raceways keep circuits out of walls

As an addition to the demonstration, baseboard receptacle raceways (not shown on diagram, p. 161) replaced most in-the-wall circuits in the bedroom wing. In the rear bedroom, National Electric Products raceway (above) provides split-wired receptacles 60" o.c. all around the room.

In actual practice, the baseboard raceway would be mounted on the finished wall and not on studs as shown. A three-wire No. 12 harness complete with receptacles is set into it. Cover is snapped on to complete the job. Material cost for the room: $24.72. When one hot wire in the three-wire harness is used for a switch leg, a fourth conductor can be spliced in (right, above) to provide future 240-volt service.

Raceways can reduce inspection time and labor

Many experts believe surface raceways will soon be the cheapest way to provide outlets in nonbearing partitions erected after the perimeter walls are completed. They can be installed and inspected at the same time as the finished wiring, require one less call from the electrician, only one inspection.

In the front bedroom, two Wiremold raceways were used, one with split-wired receptacles 60" o.c. and the other using 30" centers. Wiring harnesses are placed in the raceway channel and covers snapped in place. Photo at right above shows 240-volt receptacle on same three-wire harness supplying the duplex 120-volt split-wired receptacle (see detail, page 161). Material cost for the room: $26.54.

Raceway cost should come down with wider use

The demonstration house showed that some contractors and builders will need more experience in working with surface raceway before installed costs can come down. But Builder Bob Schmidt of Beria, Ohio—who uses surface raceway to get the advantages of one-stop wiring and one-stop inspection in his integrated building operation—says that he can now use the raceway at less cost than conventional wiring.

In the middle bedroom of the demonstration house, a two-wire plastic raceway by Bulldog was used. A special fixture (right above) feeds the hot wires of the cable to the hot wire of the strip on either side of the room. Material cost, including 12 movable single receptacles: $12.53. (END)
Five Star Home 2809-C: Four-bedroom home for large family. Space planned to accommodate many activities going on simultaneously. Traditional exterior treatment; formal living and dining rooms; access from rear to family room for outdoor serving; two-way fireplace.

Five Star Home 2809-F: Outstanding plan arranged for convenience, enjoyment of family life. 50' width of house planned for narrow lot. Kitchen core between formal-informal living areas. Excellent play supervision. Baths-hall-utility core for quiet bedrooms.

Five Star Home 2809-B: Maximum benefit from split level planning. Exceptional site-adaptability. Uninterrupted roof line; front entry hall for whole-house access; vaulted ceilings for spaciousness in main level. Excellent division of activities through inspired multi-level planning.

Five Star Home 2809-A: Smallest of 6 Idea Homes, but outstanding plan for family living. Overall, 28' x 48'. Convenient kitchen-to-terrace serving. Indoor-outdoor access from main living areas. Alternate carport locations for terrace privacy allow great adaptability to lot location and size.
Five Star Home 2809-E: Subtle blend of modern and traditional, for convenient, up-to-date living. Central hall for space-saving access to any room. Plan adaptable to 4th bedroom, family room or study. Dining L enlarges living area. Convenient kitchen, big enough to double as sitting area, playroom.

Five Star Home 2809-D: A U-shaped plan to enclose a screened living area. Small glass areas between roof beams give additional light. Window areas open on screened court for privacy. Protected family court (on south) adaptable to all climates. Children have own wing, bath, and access to family court.

Your choice of SIX BH&G Idea Home Models FOR 1958 PROMOTION!
—most exciting, most flexible program we’ve ever offered to meet your needs!

There’s nothing so powerful as an idea in selling homes to the American public! Since 1953, more than 9,000,000 people have turned out to see BH&G Idea Homes. Why? Because they’ve come to associate these homes-of-the-year with the newest, the best ideas in home building! For 1958, BH&G offers you not one, but SIX Idea Homes—increasing the range of what you can offer your customers, broadening the appeal of your own program for the year. To bring out the crowds, ring up more actual sales in 1958, tie in with this great promotion! Send in the coupon below.
At a single location just six blocks from the center of Champaign, Ill., families can now shop for a new house—and most of the things that go into it.

The new kind of merchandise mart that makes this possible is Clarence Thompson's "House and Home Style Center" (above). It sells home furnishings, appliances, garden equipment and landscaping. And all these products are displayed in and around four houses, which are also for sale ($5,000 to $20,000 without land).

The center, opened in December, is a team effort to perk up demand for new homes and home products. Sponsor Thompson, a Champaign lumber dealer, heads up the Lumber Dealers Research Council (he helped pioneer Lu-Re-Co. wall panels and roof trusses). Co-sponsors are 18 local merchants.

Thompson built the center's houses on land which he leases. He retained Design Consultant Bill Pusey of Champaign to coordinate color schemes, landscaping and furniture arrangements.

Co-sponsors, who share advertising and maintenance costs, use the houses to give the public "a living view of their products in action."

No one-shot deal, the center is a permanent merchandising mart. Displays will be changed often. And even the houses themselves will be replaced.

Says Thompson: "If a buyer wants a new home in a hurry, he can buy it right off the shelf—have it moved to his lot and ready to live in in a week."
Sales leads:

**Stick to one color** inside your model house. That's the advice of C. Tony Pereira, Los Angeles color consultant and exponent of the "lived in" look in model homes. He says: "Use several shades of the same color. That way, you get a more unified look in your model. What's more, the house looks bigger than if you mix up colors."

"**Business is better**" buttons, worn by his salesmen, worked wonders for Bill Underwood, Jackson, Miss. In one month, he sold more houses than in the previous three.

"**Code-breaker**" house stirs talk about Clayton Powell's homes in Savannah, Ga. It has above-the-slab plumbing, wall-hung toilet and end-drain tub. Says Powell: "Keep tongues wagging about your houses if you want to keep sales moving." His other talk starters: acoustical tile in some houses, variety of roof pitches and textures—cedar shingles, asphalt shingles and built up roofs. Powell builds fast, too. For the full story, turn to page 139.

"**Sold**" signs on houses don't help sales, says Bill Beck of Odessa and Midland, Tex. "On the contrary, they discourage prospects who want a house just like one that's already sold. All our houses carry 'For Sale' signs until someone actually moves into them."

**Direct-mail selling** is given a new twist by Cooperative Home Builders, Chicago. Pictures of a 12-year-old girl are featured in the builders' letters, brochures and other direct-mail advertising. Reason? Sales Vice President Gene Dreyfus says repeated use of the child's picture makes it a company identification—symbolizes the full, family life at the company's tract.

**Builders get sales help** from a supplier in Dallas. The McAtee Co. picked several top builders for a merchandising session on its products (including Truscon steel windows), then featured the builders one at a time on a series of local TV shows. Result: many more visitors to the builder's models.

**What's his income?** Despite some salesmen's misgivings, it's easy to find out what prospects earn, says Pittsburgh Merchandising Specialist Stan Edge. Advises Edge: "Just look the customer in the eye and ask him."

**Gifts to buyers** build good will for J. P. Yancey of Newport News, Va. Yancey sends gifts (movie tickets, certificates to restaurants and service stations, etc.) and welcoming letters to families when they move into his houses.

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**Why not show them the hidden assets they can't see?**

The two home buying prospects above are "seeing a wall built."

They are watching a slide-type display—United States Gypsum Co.'s "New Home Evaluator." The display is part of USG's "Hidden Assets" program to help builders merchandise what home buyers cannot see on the surface of a new house. It shows any 12 of 100 hidden products and features.

**Disc jockey plugs Florida tract from a model house**

In Bradenton, Fla., Bayshore Gardens sponsors an on-the-spot disc-jockey program to maintain its sales pace—10 to 15 houses a week, according to Ad Director Alan Morton.

Disc Jockey Tom Gillies of Bradenton's WTRL broadcasts "Sunday on the Sun Coast," a five-hour weekly show, from a model house at Bayshore Gardens. Between records, he talks up the development's advantages and interviews model-home visitors.

**Are other builders' houses diverting your prospects?**

Faced with that problem, Cameo Home Builders of Detroit relocated their models near a main highway and fronted them with the broad entrance road and colorful, brightly lighted sign shown above. Result, says Cameo's Mort Blum: "More traffic, more sales."

Previously, Cameo was not getting all the prospects pulled by its ads. Reason: its models were located at its tract—smack in the middle of a new 5,000-home community; prospects were often diverted by competing projects before they reached Cameo's homes.

continued on p. 172
New cabinet lavatory—new wall-hung

Stunning New Gracelyn Cabinet Lavatory has one-piece china bowl and counter top. Unbroken surface is easy to clean. It has wide counters for toiletries and convenient storage space in the stylish cabinet. Double doors feature magnetic catches. Legs for 31" or 34" floor to lavatory-rim height... have adjustable leveling tips. Comes in 32", 36", 42" lengths, 18" width. Cabinet in neutral beige.
toilet add extra sales appeal to homes

New Wall-Hung Norwall Toilet has blend-in design...gives bathrooms that "look of tomorrow." Completely off the floor, it makes cleaning of fixture and floor a snap...no more awkward reaching on hands and knees. For easy cleaning, it has a contour seat and cover that snap off by releasing push buttons on either side. The Norwall hangs on combination carrier and drain. Installs easily on standard 6" stud wall.

New single-lever faucet gives extra kitchen convenience, service...with the flick of a finger, you can blend hot and cold water and regulate water flow from full force to a trickle. American-Standard, Plumbing & Heating Div., 40 W. 40 St., New York 18, N.Y.
Something new for a split: give it "front" and "back" stairs

New ideas in home design get lip service from plenty of builders but action from only a few. One who acts is Frank Robino of Wilmington, Del.

Robino had his biggest year in 1957—sold well over 200 homes, double his '56 volume. Big reason for his success last year: a pair of fast moving split-level models.

But he wasn’t satisfied—wanted an even more salable house for 1958. So he worked with Architect Howard Greenhouse to design the unusual split-level model shown on this page.

Robino’s new split stands out because it has two short stairways from grade level to living areas (see drawing above). The front stairway leads from the foyer to the living room, the back stairway from the family room to the kitchen. Result is something new in split-level design—a circular traffic plan.

This is a boon to a family with children (Robino’s average buyer has two children, according to a recent market analysis). Children can enter the kitchen from the backdoor without passing through the living room. The housewife can look down the backstairs to the family room, thus keep an eye on children playing there.

Robino’s new model stands out in other ways, too. For instance:

- It’s a lot of house for the money—1,673 sq. ft. of living space (plus a 490 sq. ft. basement and a one-car garage) on a 70’x120’ lot for $16,300.

- It has a front porch (see photo left) that gives it a lower look than most splits and shelters the front door, garage door and family-room window.
What the leaders are doing

continued from p. 172

In Knoxville...

You can save 50% on paneled walls

Harvey Rench uses hollow-core Philippine mahogany doors for interior walls of living and family rooms. He buys them for less than $8 apiece; builds this kind of wall 50% cheaper than a wood-paneled stud wall.

"But the important thing is that people like it," says Rench.

Period fireplace is builder's signature

To give his houses a hallmark, J. A. Merritt puts a "Mount Vernon mantle" in every house. He first saw this fireplace in a photograph of George Washington's home and got the Witt Building Materials Co. to copy it for him in Luan mahogany for $70, delivered in one piece.

Folding doors can open or close a plan

With louvered folding doors, Builder Bill Dawn makes it easy for his buyers to have an open plan one minute and a closed plan the next. He uses the doors to close off or open up the family room, the kitchen and the third bedroom. "I let people do what they want when they want it—and they like it."/END
ANNOUNCING PHILCO'S Citation
...A FULL FIVE YEARS

FIRST TIME ANYWHERE...COOK 3 WAYS...SEE ALL WAYS!

Citation “SPLIT LEVEL”* OVEN

IT'S AN AUTOMATIC OVEN with a new innovation: closed-door broiling. Nothing could be more ideal for roasting and broiling meats. It has full-window front, too... plus electric Roastmeter, automatic timer. It's the think-for-stuff oven women want—cash in on it!

IT'S A ROTISSERIE...it's the new appliance women want most! And this one has the extra advantage of being full width for easy basting—easy viewing. No front-to-back inconvenience as in old-fashioned ovens.

IT'S A BAKING DRAWER...the cook looks down and into this glass-topped, waist-high drawer and watches how her pies, cakes and cookies are baking! All eyes will be on this never-before-seen feature!

IT'S FIVE YEARS AHEAD. Never has any builder been able to show anything as deluxe as this see-through Citation Split Level oven. It was the sensation of the Home Builders Convention. Make it your own sales clincher—now!

PAT. PENDING
CUSTOM KITCHEN APPLIANCES

AHEAD OF THEIR TIME!

IDEAS SO REVOLUTIONARY
THEY WERE SELECTED FOR THE
FIRST NAHB RESEARCH HOME.

IDEAS SO EXCITING, BUILDERS AND
PUBLIC ALIKE DEMANDED THESE RESEARCH
APPLIANCES BE MADE AVAILABLE!

Never—except in a builder’s dream—has there been anything quite like Philco’s Citation Custom Kitchen Appliances. New ideas . . . new lines . . . ingenious flexibility . . . great economy . . . everything to sell your home faster, building your profits every step of the way.

Only Philco has the fabulous Citation Split Level oven . . . the automatic range top with remote controls. Only Philco refrigerators-freezers have snap-in panel fronts to put every color, every wood grain right at your finger tips, for a perfect kitchen color match! And to top it all, Philco’s Custom Appliances are easily installed in wood or metal cabinets made by national manufacturers or your local lumberman. Remember: Philco’s Citation line was the sensation of the Home Builders Convention. It can be the high light of every home you build, too!

NEW SNAP-IN FRONTS GIVE YOU AN UNLIMITED COLOR
CHOICE ON REFRIGERATOR-FREEZER AND DISHWASHER!

MATCH ANY COLOR, ANY WOODWORK BY SIMPLY
SNAPPING IN FORMICA® PANELS. For the first time you can sell
a custom kitchen with the built-in appliances matching or complementing the cabinets. That's right . . . even wood effects can be carried right through to the refrigerator-freezer and dishwasher!

It's done simply, inexpensively with Philco's ingenious snap-in panel idea. The refrigerator-freezer and dishwasher are delivered with the front panel made of copper finish on the one side, stainless-steel finish on the other. The customer may prefer the copper or stainless finish—or she can have her choice of any type of Formica paneling. Simply have your local cabinetmaker snap sheets of Formica into front panels to create a perfect custom-kitchen look.

Formica comes in more than 73 colors and finishes, so there's no limit to what color effects you can offer. Best of all, you do it without fuss or bother. The home buyer merely flips through a Formica color chart—and you can give her the kitchen of her dreams.
PHILCO DESIGNERS HAD THE IMAGINATION
AND DARING TO DO SOMETHING REALLY
DIFFERENT WITH CUSTOM KITCHEN APPLIANCES

CITATION RANGE TOP WITH REMOTE
CONTROLS...AND AUTOMATIC GRIDDLE

This amazing range top adapts to your kitchen design. The Philco push-button panel operates by remote control and can be wired in any convenient spot you choose.

And there's more: Philco's Citation range top has cook-by-color push-button controls, fluorescent lighting, automatic griddle. In addition, automatic temperature-controlled and electrically timed 8 inch burner makes any cooking utensil automatic. Fits over standard 30 inch cabinet. Doesn't interfere with drawers. Choice of four styles: automatic remote control with griddle, automatic drop-in, standard drop-in, and standard built-in.

Built-in wall oven has new Philco closed-door broiling, complete window front, full-width rotisserie, Roastmeter... everything to make it wonderfully automatic!

PHILCO'S Citation CUSTOM KITCHEN
APPLIANCES OPEN UP A NEW ERA OF DRAMATIC
FEATURES AND DECORATING FLEXIBILITY

NEW Citation REFRIGERATOR-FREEZER
Available in vertical or horizontal styles. Complete with famous Philco Supermarketer features—even Tri-frigeration.

NEW Citation DISHWASHER
Snap-in front here, too. Individual roll-out basket and pump drain. Food waste disposers also available.

NEW Citation OVENS
Each is completely automatic with closed-door broiling. Choice of 3 styles. Split Level oven, deluxe and standard wall ovens.

Philco's Citation Custom Kitchen Appliances are built for easy installation in either wood or metal cabinets made by national manufacturers or your local lumberman.

For further information and specification write:
Philco Citation Custom Appliances, Philadelphia 34, Pa.

LOOK AHEAD...and you'll choose PHILCO.
This sticker is a profit builder.

It reminds home buyers that the windows in the home they are about to buy are equipped with the finest metal weatherstrip and sash balance available . . . Zegers Dura-seal. This “Advertised in LIFE” sticker helps you sell the quality features in the home you have built. Dura-seal is the only product of its kind backed by national advertising. Let this sticker work for you! Contact your lumber dealer—he will show you an actual sample and explain the many Dura-seal benefits. Zegers, Incorporated, 8090 South Chicago Avenue, Chicago 17, Illinois

Send for this free booklet, “Today—Quality Sells The Home Buyer.” It tells all about Dura-seal and the entire promotion program back of it.

ZEGERS

DURA-SEAL COMBINATION METAL WEATHERSTRIP & SASH BALANCE

FEBRUARY 1958
New gravity-fed nailer drives three nails a second

Now you can nail down roof sheathing and rough flooring in a fifth the time it takes a man with a hammer.

The Wiset electric nailer operates on house current or any other 110 volt ac circuit. A Bosch electric hammer drives the nails which are fed from a spring-loaded storage cartridge. The prototype cartridge, developed for the manufacturer by Midwest Research, holds 324 8d box nails but cartridges can be adapted to hold nails from 6d to 20d. The cartridge is quickly reloaded with an automatic sorter. Nail placement can be exactly controlled by the operator; each nail is properly set by the multiple-blow hammer. The nailer can be readily detached from the hammer so the hammer can be used with other attachments to drill, gouge or scrape concrete, or with various size shovels for trenching.

The machine is spring loaded so that it can be efficiently and easily operated without throwing any weight load on the operator.

Complete with hammer, nailer and sorter: $695 fob Kansas City.

B&H Homes, Kansas City.

For details check No. 1 on coupon, p. 200

29" power trowel

Newest addition to the Master trowel line is designed to work the largest area and still pass through 30" door.

Like all Master trowels, the 29" unit has an automatic clutch. A handy push-pull lever on the handle adjusts the angle of all three blades while the trowel is running. A throttle on the handle gives the operator full control at all times and a "dead-man" control idles the trowel if the operator lets go.

Power is a 2½ hp gasoline engine. Weight: 77 lb. Price: about $265.

Master Vibrator Co., Dayton
For details check No. 2 on coupon, p. 200

New gun for multicolor paints

Gray Co. has a new spray gun for use with many short-run colors.

The self-contained unit fits right on a five-gallon paint can, sprays direct from the shipping container. The air-powered pump (it operates on the same principle as an auto fuel pump) mixes and pumps all new multicolor paints as well as standard paints, primers, sealers, etc. The unit requires no bleeding when changing colors so changes can be made in seconds. Spray is available immediately when the gun is opened.

Gray Co., Minneapolis
For details check No. 3 on coupon, p. 200

Here's a safer stud driver

Studs driven with Remington's new model 455A will not fly free if mistakenly fired into soft wood, sheet metal or plaster.

A captive piston is threaded to each stud before the stud is loaded into the driver. If the stud is overdriven by as much as 3/4", the piston is stopped by an aluminum buffer in the guard.

After a normal shot, the driver is simply turned 45 degrees to free the piston which can then be unscrewed from the stud.

Remington Arms Co., Bridgeport
For details check No. 4 on coupon, p. 200
New all purpose crawler-loader

This new loader can do most of the jobs you will meet with in doing your own land development.

There is a choice of bucket sizes for digging, moving materials and loading. Attachments include backfill blade and fork lift. Outfit can be furnished with heavy-duty scarifier which attaches to rear of tractor.

John Deere, Moline, Ill.
For details check No. 5 on coupon, p. 200

Wheeled loader is first in new line

New Case loader has 4-wheel drive, rear wheel steering, new short, rigid lift arms that lower center of gravity, make the machine safer and more stable.

The unit has a forward reach of 62½" and lifts to a 7' dump height. Rear wheels carry 40% more weight than the front wheels so there is no tendency to buck when digging.

J. I. Case Co., Racine, Wis.
For details check No. 6 on coupon, p. 200

Trencher for small builders

The new model 77 Parsons ladder type Trenchliner is designed for utility work of the sort called for in most new home developments. The unit, which can be fitted with a variety of sizes and types of trenching equipment, is just going into production. When available, the new trencher will sell for about $7,000.

The Parsons Co., Newton, Iowa.
For details check No. 7 on coupon, p. 200

This unit can do almost any loading, digging or moving job at the roughest site

New utility wheeled tractor, the International 330, has built-in power capacity for handling heavy-duty backhoes, hoisting 4,000 lb. loads with a fork lift, or lifting 1,250 lb. loads with a front-mounted loader.

Over 35 types of utility equipment are available as options, including blades, mowers, snow plows and sweepers. With optional "Fast-Hitch" attachment, many items of rear-mounted equipment are available. With these it is possible to do a variety of utility jobs in one day with the least change-over time.

Delivering 35 hp at the belt, the new utility model is heavier than most tractors in its class to provide the strength and traction needed for fast work even in deep mud. Power steering and an independent power take-off are also available.

International Harvester Co., Chicago
For details check No. 8 on coupon, p. 200

continued on p. 180

FEBRUARY 1958
Reusuable forms save $60 a house

These 16-gauge sheet metal forms, with replaceable % plywood faces, are designed to speed foundations, save man hours and materials. The lightweight forms include both footing and wall, can be set up in less than two hours, stripped in 15 minutes. Available in up to 8' lengths, the 32" high forms are complete with panels, ties and tie puller. Cost: about $2,500.

Proctor Products, Seattle
For details check No. 9 on coupon, p. 200

Sabre saw cuts up to wall

Heavy duty sabre saw can do the work of a rip or cross-cut hand saw, jig or keyhole saw. At 3,300 strokes per minute, it will cut through a full 2" of lumber with a ½" stroke.

Stanley Tools, New Britain, Conn.
For details check No. 11 on coupon, p. 200

Low priced jig saw

Latest addition to the Whiz saw line cuts 2" lumber, plastics, light metals, etc. Saw has heavy-duty motor, die-cast aluminum housing, oil-less bearings. Price: $24.95.

Forsberg Mfg. Co., Bridgeport
For details check No. 12 on coupon, p. 200

Here's a double-acting sander

This new Cummins sander can give either straight-line finish sanding or orbital rough sanding at the turn of a key, no parts need be removed or fitted. Retail price: $49.95.

Cummins Portable Tools, Milwaukee
For details check No. 14 on coupon, p. 200

B&D router has ¾-hp motor

Black & Decker's new fine finishing tool has nearly 100 different bits and cutters. Depth adjusts from 0" to 1" by 1/64" for a 1½" total feed. Weight: 6½ lb.; price: $59.50.

Black & Decker, Towson, Md.
For details check No. 15 on coupon, p. 200

New orbital jig saw

Skil's new jig saw cuts up to 2" lumber at 3,350 strokes per minute with an orbital action. The 60-cycle universal motor is available for either 115 or 220 volt service. Price: $47.50.

Skil Corp., Chicago
For details check No. 16 on coupon, p. 200

continued on p. 182
VISIBLY DIFFERENT

REMOVABLE WOOD WINDOWS

STYLED FOR DISTINCTIVE HOMES PRICED COMPETITIVELY

You can now get custom styling at stock millwork prices. The modern LIF-T-VIEW pattern, shown here, is just one of the many new R-O-W styles designed to provide more architectural variety with quality windows.

Every builder wants his homes to have the flair of distinctive styling. That's one reason why more and more smart builders and owners are depending on the full line of R-O-W window types and sizes.

They are sold on the removable feature, too, and the LIF-T-LOX balance that makes raising and lowering "finger-pressure" easy. All of this—plus the insulation and beauty of fine wood—at competitive prices.

See your local lumber dealer or write

R·O·W SALES COMPANY • 1311 ACADEMY • FERNDALE 20, MICHIGAN

FEBRUARY 1958
New products

Three more wall-hung toilets reach the market

Soon to be in production, new models by Universal-Rundle, Crane and Chicago Pottery (below) bring to six the number of tank-type wall-hung toilets* introduced within the last year. Ingersoll-Humphreys was the first (H&H, March '57). Since then, American Standard has introduced its first model (H&H, Nov. '57) and Apsco has incorporated a wall-hung unit in its prefab plumbing wall (H&H, Jan. '58).**

Thus six manufacturers have solved the problem—which long held up introduction of this type of unit into homes—of getting proper flushing action in a wall-hung unit. They've done this by locating the waste outlet at the wall low enough (centered about 4½" to 4½" from the floor) to get good siphon action (no problem in an on-the-floor toilet with its vertical waste line).

Even with these new units, houses with more than one bath still can't have completely above-the-floor plumbing, need a separate waste line through the slab for each bathroom. The reason: with all present wall-hung units, the waste line to the sewer must be located right below the toilet waste line. Because their outlets are so low and because most codes specify a 4" waste line, there is no room to make an elbow turn in the plumbing wall so waste from a second or third bath can be led above the floor to one central waste line.

Further news is made by the development of a new carrier (left). By incorporating the waste connection as an integral and structural part of the carrier, Wade Mfg. Co. (Elgin, Ill.) claims to have produced a unit that will not only be much faster to install, but stronger. This unit can take a load of 450 pounds 30" from the finished wall with only a .008" deflection. Wade will soon have a new carrier for back-to-back bathrooms, and both models will be available later this year with some of the new wall-hung toilets.

*Wall-hung toilets with flush valves have been in commercial use for years. This type requires four gallons of water in the first 10 seconds. Few residential areas have the water pressure (15 lbs. with the valve open on a 1" line) that this would require.

**For details on earlier units, check Nos. 17, 18, 20 on coupon, page 200.

U-R unit makes a bid for homes

Universal-Rundle, long in the manufacture of wall-hung toilets for commercial installation, enters the residential wall-hung field with this close-coupled tank model soon to go into production. Designed for use with a 6" wall, the unit has a carrier with a tapped side inlet for lavatory waste, and a 4" tapped inlet for toilet waste line. Lower fin-like bottom of bowl is necessary to get trap low enough for siphon action in flushing.

Universal-Rundle, New Castle, Pa.

For details circle No. 19 on coupon, p. 204

Crane wall-hung conceals tank

To make bathroom cleaning easier Crane uses an in-the-wall tank on their new unit. Tank is only 5¾" thick (thickness of a 2x6 stud in plumbing wall). Steel panel covers tank and can be easily removed for maintenance. Waste outlet fits standard 4" line. The carrier that Crane uses incorporates the 4" waste connection as an integral and structural part (rather than using a simple crossbrace through which the waste line is run).

Crane Co., Chicago.

For details circle No. 21 on coupon, p. 204

Chicago tank is close-coupled

This unit is mounted on the finished wall with the tank exposed and coupled close to the bowl for easy maintenance. Designed for a waste line that goes down through the floor in the plumbing wall, the unit has one of the quietest flushing actions on the market, says the manufacturer. Dimensions are 27½" from front of bowl to wall; 22¼"x9¾" deep tank size; bottom of the bowl is 1½" above finish floor; and bowl height is 15".

Chicago Pottery Co., Chicago.

For details circle No. 22 on coupon, p. 204

continued on p. 184
There'll be a lot of changes in home building this year, mister!

Which way are you headed?

Up?
Down?
Out?

Now's the time to face up to the problems of your business, and seek out solutions that will bring you steady growth, more profits!

Today's competition favors the builder who operates at top efficiency. Who takes advantage of every time-saving, work-saving, money-saving method. Who weeds out every unnecessary expense, makes every working dollar work harder. Ignore these facts and only catastrophe can result.

If you're genuinely concerned about the future of your home building operation, we want to talk to you. Show you how the Harnischfeger Plan can root out the problems sapping at your profits, the hidden inefficiencies holding back your growth. Write us a letter and get the full story. Select dealerships available in Wisconsin, Illinois, Indiana, Ohio, Missouri, Iowa, Michigan, Minnesota, and northern Kentucky.

HARNISCHFEGER HOMES, INC.
DEPT. HH-582 • PORT WASHINGTON, WISCONSIN • PHONE 611

FEBRUARY 1958
complete builder flexibility

the all-new WASTE KING Super DISHWASHER-DRYER with interchangeable front panels

You get a complete color, texture and material choice to individualize the kitchens you sell. Stainless steel, copper, white, primed coat—ready for any color you desire. Adaptable for any wood panel you choose. Widest design possibilities ever put in an appliance!

PLUS THESE 6 OTHER MOST WANTED BENEFITS to help sell your customers fast!
• Automatic pre-rinsing
• Better washing—even pots and pans
• Spotless drying
• Humidity-free drying for cool kitchens
• Largest capacity—easiest loading
• Super-Hush quiet operation

GET THE COMPLETE FACTS about the WASTE KING Super Dishwasher-Dryer. WRITE TO:

WASTE KING CORPORATION
3300 East 50th St., Los Angeles 58, Calif.

Built-in bathroom scale

NuTone's new scale is neatly out of the way when not in use, pulls down when it's needed. The scale fits an opening 14½" x 23¾" between 16" joists and attaches to joists with four screws. Outside dimensions when closed are 16½" x 25½". Scale part of unit is built into the inside of a steel door. It has an easy-to-read dial, a wide tread area. Door latches when closed.

NuTone, Cincinnati
For details check No. 23 on coupon, p. 200

Rubber undercushion

New undercushion for smooth surface floor coverings is claimed to have outstanding comfort and noise absorption values. Called "Treadlite", it is made of foam rubber bonded to felt; is intended for use on suspended wood floors under linoleum, vinyl, or other sheet goods or tile. Comes in rolls 90' long, 36" wide. Cost will be about 29¢ a linear foot, retail.

Congoleum-Nairn, Inc., Kearny, N.J.
For details check No. 24 on coupon, p. 200

Insulating siding

This aluminum siding has built-in insulation and moisture control. Formed aluminum sheet is backed with ⅛" of Dylite, Koppers' foamed styrene. Tiny vents in the bottom edge let any accumulated moisture escape out. The siding is claimed to have three times the insulation value of redwood, yellow pine, or fir. The new siding is being produced in nine baked enamel colors.

Alsco, Inc., Akron
For details check No. 25 on coupon, p. 200
Kitchen ventilators added to line

Lau, maker of attic and window fans and portable air circulators, has introduced a line of kitchen range and oven ventilating hoods. Available in standard or deluxe lines. Both have convenient controls, safety switches, washable filters; come in full range of lengths, with copper tone or silver grey enamel or stainless steel. Oven unit removes fumes and heat directly from oven.

The Lau Blower Co., Dayton 7
For details check No. 26 on coupon, p. 200

1958 washer-dryer team

Maytag’s new dryer (left above) has a filter for incoming air; a sprinkler to provide uniform, automatic dampening of clothes; and three separate drying cycles—for items like towels that need fluffing, for regular washables, and for wash-and-wear items. The companion washer (right) has a new agitator that sets up vertical water currents, new water-level controls, and cold as well as warm and hot water wash. Both units are available in white or pastel green, pink, and yellow.

The Maytag Co., Newton, Iowa
For details check No. 27 on coupon, p. 200

New quiet vent hood

Vent-A-Hood’s 58 model has a dual-exhaust system built into the single blower. The new unit is said to remove more air with less noise. Separate push-buttons control each of the dual blowers and the light. Hood comes assembled and wired with a 30” section of vent duct and collar.

Venta-A-Hood, Dallas
For details check No. 28 on coupon, p. 200

Hood for charcoal grill

Char-Grill Vent-Hood is claimed to solve the problem of inadequate ventilation for indoor charcoal cooking. Designed primarily for use with the Char-Grill barbecue unit, it can also be used with other cooking equipment. Hood is 36” wide, 32” high, 24” deep; comes with exhaust blower, removable filter, in three finishes. Majestic Co., Huntington, Ind.

For details check No. 29 on coupon, p. 200

continued on p. 188
Home buyers today are smart; they know what to look for in a home—it’s estimated that 60% are buying their second home. They look into a home for such Hidden Assets as quality materials, sound construction and lasting value.

The U.S.G. “Hidden Assets Program” capitalizes on these modern home-buying habits. It helps you promote important construction features in your homes by bringing them forcefully to the attention of prospective home buyers. Look at the effective selling aids you get:

- Ingenious custom-built “New Home Evaluator” — dramatically points out the particular construction features that you build into your homes.
- Consistent national advertising — designed to support and promote you as a builder of “Homes with Hidden Assets.”
- Exclusive Hidden Assets plaque — identifying you as a Hidden Assets builder and enabling you to cash in on this national program.
- Local promotion package — specially prepared for your use in your area, it includes a promotion time-table, publicity releases and tips, special promotion ideas, newspaper ad mats and radio commercials to sell your homes faster!

UNITED STATES GYPSUM
the greatest name in building
lifetime satisfaction to prospects—It’s yours in the new SALES PROGRAM!

Cash in on this unusual opportunity to sell your homes' best features. Clip the coupon below and mail it today for full information. Start building new home sales with the U.S.G. “Hidden Assets Program”.

United States Gypsum Company
Dept. HH-82
300 West Adams Street
Chicago 6, Illinois

Gentlemen:
Yes, I want to boost my new home sales. Please send me more information about the “Hidden Assets Program”.

NAME __________________________
COMPANY _______________________
ADDRESS _________________________
CITY OR TOWN _______________ ZONE ___ STATE ____
New products

New panel core material
Asbestos Cell-Air-Core is an asbestos honeycomb impregnated and coated with a portland cement compound. It may be faced with a variety of skins for exterior or interior walls. It is easily cut so conduits can be run inside the panels. Its compressive strength is 155 psi, it is highly water resistant, and will not support combustion, according to manufacturer's claims.

The Bettinger Corp., Waltham, Mass.
For details check No. 30 on coupon, p. 200

Ceramic mosaic tile
Byzantile comes in three basic shapes, seven basic colors. It comes in 3”, 1⅛”, and 1⅝” squares, diamonds 1⅛” on a side, and diagonal halves of 3⅛” and 1⅝” squares. Colors run from white, black, and grey to red and tan. Price per sq. ft. from $1.14 to $2.70, fob Zanesville, Ohio. Byzantile will have Mosaic’s Swift-Way mounting system.

Mosaic Tile Co., Zanesville, Ohio.
For details check No. 31 on coupon, p. 200

Central vacuum unit improved
H-P Products, producer of built-in central cleaning systems, has replaced its two-impeller vacuum producer unit with a new unit with three impeller blades. The new model is quieter and smoother in operation. In addition, the entire separator tank has been redesigned for greater efficiency. Input is 1.44 hp; output, ¾ hp. Vacu-Flo built-in systems retail for $220 up.

H-P Products, Louisville, Ohio
For details check No. 32 on coupon, p. 200

Plastic protected plywood
Prefinished plywood paneling has a vinyl film bonded to its surface as protection against moisture, staining, scuffing and scratching. Eight-foot panels are 16” wide, ¼” thick; come in oak, mahogany, birch, walnut; can be cut with a saw.

Nickey Brothers, Inc., Memphis
For details check No. 33 on coupon, p. 200

A Permaline fibre pipe house-to-street sewer installation by N. J. Rodrigue, in a home project at Houma, Louisiana. Builders all over the country have found Permaline economical, profitable to install.

L-o-n-g Lengths Make Permaline Fibre Pipe Easier To Install
L-M pioneered 10-foot lengths of Permaline Fibre Pipe are easy and economical to install. With these long lengths there are 50% to 80% as many joints. L-M tapered couplings are simply driven onto the tapered ends of the pipe. No cement, no calking.

L-M Permaline pipe is light and easy to handle—on the truck, and on the job. Joints are watertight and root-proof. Permaline pipe resists soil acids and alkalis, hot water, detergents. Ground heaving and settling don't cause joint leakage, as they well may with other types of sewer pipe.

Permaline Fibre Pipe is profitable to sell, profitable to install, profitable for the home owner. It has many uses—for sewers, footing drains, downspouts, land drainage, irrigation, barn drains, etc. Get complete information. Ask your wholesaler, or mail the coupon below to Line Material Industries, Milwaukee 1, Wisconsin.

Sizes: 3-foot lengths in 2”, 4”, 6”, and 8”; 8-foot in 3”, 4”, and 5”; 10-foot lengths in 3”, 4”, and 6”. Perforated in 4” and 6” sizes, all lengths. Full line of fittings and adaptors to other types of pipe.

L-M PERMALINE BITUMINOUS FIBRE PIPE for better sewers and drains

Mail This Coupon
LINE MATERIAL INDUSTRIES
Milwaukee 1, Wisconsin

This seal is your guarantee of recognized quality in Bituminous Fibre Pipe.

Mail This Coupon
LINE MATERIAL INDUSTRIES
Milwaukee 1, Wisconsin

Send me free bulletin with complete information on L-M Permaline Fibre Pipe for sewers and drains.

325-B

Name__________________________
Company__________________________
Address__________________________
City__________________________State__________________________
Type of business, please__________________________

Byzantile comes in three basic shapes, seven basic colors. It comes in 3”, 1⅛”, and 1⅝” squares, diamonds 1⅛” on a side, and diagonal halves of 3⅛” and 1⅝” squares. Colors run from white, black, and grey to red and tan. Price per sq. ft. from $1.14 to $2.70, fob Zanesville, Ohio. Byzantile will have Mosaic’s Swift-Way mounting system.

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Prefinished plywood paneling has a vinyl film bonded to its surface as protection against moisture, staining, scuffing and scratching. Eight-foot panels are 16” wide, ¼” thick; come in oak, mahogany, birch, walnut; can be cut with a saw.

Nickey Brothers, Inc., Memphis
For details check No. 33 on coupon, p. 200
New entry in kitchen sink field

This double-compartment, ledge-back stainless steel sink is just one of a new line of sinks being introduced. Features include acoustical undercoating to deaden sound, 4" ledge back with four-hole faucet drillings (one with snap-out plug button) flange corners die-trimmed on 1/2" radii for easy installation with Huddee type frames, pressed wood pressure strip secured under flange. This model: $30.
Ekco Products Co., Canton, Ohio
For details check No. 34 on coupon, p. 200

Built-ins from Westinghouse

Built-in range units in Westinghouse's new kitchen line include two ovens and four surface platforms. Both ovens—one a 24" model, the other 17" wide—come in yellow, aqua, pink, copper and chrome. Two of the surface platforms have four cooking units; two have two units. Heat control systems for all of the cooking tops operate between markings so there is an almost unbroken range of heat control.
Westinghouse, Mansfield, Ohio
For details check No. 35 on coupon, p. 200

Emphasis on built-ins

Gibson's 1958 equipment includes a 20" automatic oven that fits in a 24" wide cabinet and 20" x 34" cook top units that fit into 36" counter tops. Controls for the cook tops are centered on chrome-steel switch panels which can be mounted on a back wall. Controls are color-keyed to the surface units.
Gibson Refrigerator, Greencastle, Mich.
For details check No. 36 on coupon, p. 200

Easy-to-apply plastic laminate

"Kevinite" is a flexible decorative laminate composed of core papers impregnated with an overlay of hard thermosetting resin. Can be applied to counter tops, walls, shower stalls, and other hard-wear areas with adhesive and hand roller. Comes in many patterns, colors and wood grains, in rolls 30" and 36" wide. Resists boiling liquids, greases and solvents, scratching and staining; design is sandwiched between backing and plastic covering.
Swedlow Plastics Co., Youngstown, Ohio
For details check No. 37 on coupon, p. 200

continued on p. 194

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Five sizes — ½ to 2-cu. yd. capacity — with advanced features for digging basements, driveways, loading trucks, finish grading.

Wheel-type loaders

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FEBRUARY 1958
"Take it from us... Celotex Hush-Tone Ceilings help sell homes!"

HOME BUILDERS ACROSS THE COUNTRY ARE PROFITING FROM THIS NEWEST SALES FEATURE OF MODERN CONSTRUCTION BECAUSE "Prospects like it!"

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R. E. HAYMOND: "Hush-Tone Tile is one of the important visible sales features that prospects admire in our model home. We think Hush-Tone FIESTA is the smartest idea yet in ceiling tile because it does a great job of combining quiet with beauty. Our home buyers apparently agree."

J. W. HESLOP: "The use of nationally advertised products is one of the key sales points for homes in our newest community development, Cuyahoga Manor. The idea of quieting noise with Hush-Tone Tile really helps sell homes—and prospects have confidence in the famous Celotex brand name."

E. S. & B. W. MARKEY: "In speculative building, the problem is to find products that please the prospects and still are practical for the builder. Our organization is highly pleased with your new Fiesta Hush-Tone Ceiling Tile. We intend to continue using it. Public acceptance is keen."
Leading builders know extra sales result from use of products that indicate top quality construction throughout... nationally advertised brands with good "known names." Millions see Celotex Hush-Tone Tile advertised in LIFE ... SATURDAY EVENING POST ... BETTER HOMES AND GARDENS ... LIVING FOR YOUNG HOMEMAKERS ... AMERICAN HOME. The built-in selling power of this pre-sold brand name goes to work for you when you say "Ceiling by CELOTEX."

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Construction-grade Douglas Fir or Southern Pine 1 x 4's are bolted together in a series of triangles fastened to a base ring. Homasote panels are nailed to this triangulated frame, overlapping 6" at joints for a weather-tight structure. Excluding masonry wall or foundation, the cost is less than $1.00 per sq. ft. erected.

The Homasote here pictured has a center elevation above masonry wall of 14'-5.5" and a diameter of 55'-3". This means 2,397 sq. ft. of floor area and 34,448 cu. ft. inside above masonry wall. The addition of a 4' masonry wall adds 9,113 cu. ft.

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poultry houses
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Send me the following literature and/or specification data sheets:

- Domasote
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- Homasote
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the furnace for any new home!

All-new Armstrong Counterflow oil or gas-fired furnaces are trim and compact. They fit any size home and can be installed almost anywhere in the house—utility room, closet, or alcove. These attractive appliance-styled beauties add a bit of glamour to any new home.

And Armstrong's 1958 MR. BUILDER promotion will help you sell your new homes. This hard-hitting program merchandises your homes first... with only incidental mention of Armstrong. It's complete and colorful—contains all the merchandising aids you need to bring out droves of interested prospects.

WRITE today for a FREE brochure describing the fabulous 1958 MR. BUILDER promotion, and the new Counterflow bulletin containing all the benefits, features and specifications of the great, all-new Armstrong oil and gas-fired furnaces. Address Dept. HH, Walnut, Illinois.

See Armstrong Furnaces in the exciting "Show House" issues of: Living for Young Home-makers—March and June; Saturday Evening Post—January 25 and May 10.

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A tested open-house promotion—one that has never failed to sell the demonstrator plus additional homes—is just one of many sales helps for Home-Way dealers. These include newspaper ad mats, direct mail advertising and help with financing. Thousands of qualified leads come from Home-Way's national advertising and demonstrations such as the recent "Prairie Lady" model introduction at the Farm Progress Show.

But Home-Way's unique service is the personalized design and closing conference. Bring your prospect with his lady to centrally-located Walnut, Illinois where our architects and engineers work out desired variations, estimate cost and help you close the sale.

GBH-WAY HOMES, INC.
Dept. HH - Walnut, Illinois

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Here’s a kitchen especially engineered and designed for new and remodeled apartments. It easily installs in less space than most closets.

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And once a Dwyer is in, it’s in to stay. Defies hard use and abuse. Finish is porcelain... not paint. That’s why many Dwyers have been in continuous use for more than 25 years. Send coupon for full details.

FREE CATALOG gives you full particulars and specifications on the entire Dwyer line. Models from 39 to 69 inches in width, gas or electric. Mail coupon today.

Dwyer Products Corporation
Dept. H-1502, Michigan City, Indiana

Please send new catalog on Dwyer compact kitchens.

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New saw for heavy-duty work

Cuts up to 5” deep (5½” in one model) are all in a day’s work for this line of heavy-duty saws. Unit is given extra strength by deeper steel table frame, 5” column and heavier column base, cleats instead of bolts in table top. Five to 10 hp. motor, tables to 44” x 48”, 16” or 20” blades. 16½” rise between table and motor.


For details check No. 38 on coupon, p. 200

Drawers for your built-ins

Because it is difficult to get lumber of the right size and kind to make a good drawer, because many builders don’t have the proper machinery to make drawers, and because it is difficult to estimate costs, this maker is offering knocked-down drawers that assemble quickly and easily, come in two front heights (4½” and 9½”) and five widths from 12” to 30”. Finish and hardware is added by builder. Framing-in kits available.

Firpine Products Co., Owego, Ore.

For details check No. 39 on coupon, p. 200

New rubber tile and cove base

An .080” gauge rubber tile in 17 modern colors will, maker says, meet competition for flooring installations in the lower price range. In development of the new tiles, strong color qualities were selected to compensate for the natural muting effect that rubber has on color.

Rubber cove bases are available in grey, red, green, blue, tan, and dubonnet to complement the new tiles, as well as standard black and brown. Comes in 4” and 6” heights; in lengths up to 120”.

Robbins Floor Products, New York City

For details check No. 40 on coupon, p. 200

HOUSE & HOME
More "living-room look" cabinets

New feature of these cabinets is a new height — 30½" including sub-base and counter top. This height, maker says, is ideal for mixing and a number of sit-down kitchen tasks (and for bathroom vanities). When mounted on 9½" legs, cabinet becomes standard 36" height. Cabinets are available in 32 colors and natural stains, in colonial and contemporary styles.

Wood-Mode Kitchens, Kreamer, Pa.
For details check No. 41 on coupon, p. 200

New flexible insulation

Called "Saflex," this material consists of compressed glass fibers controlled in orientation and distribution to provide maximum resiliency and eliminate voids. Patented corrugating process provides 360-deg. flexibility. Available in wide range of thickness, fibers, binders and densities. Plys of foil or film optional.

Safpac Corp., San Gabriel, Calif.
For details check No. 42 on coupon, p. 200

Heat control balances system

Using an outside bulb, a system bulb, and a room-temperature bulb, this heat control eliminates under- and over-shooting, equalizes floor and ceiling temperatures, near and distant room temperatures.

Weather Controls, Western Springs, Ill.
For details check No. 43 on coupon, p. 200

Eliminate cost of Insulating Glass

with the Glamorous fleetlite PICTURE SLIDE
Double Windows for Insulation
Direct or Indirect Ventilation
Double Weatherstripping on all four sides

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Publications on p. 198
The finishing touches that make sales!

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CLOSET AND KITCHEN FIXTURES

Get your share of the big, profitable home remodeling business with K-V's complete line of top-quality, easily-installed closet and kitchen fixtures. Each is well designed, sturdily constructed and finished in bright chrome. K-V fixtures have many exclusive features, and behind these is the K-V name—a name that has a 60-year reputation for highest quality. Ask your K-V sales representative today.

The handsome diamond pattern in Misco Wire Glass combines beauty and strength. Obscure Misco, employed to screen this area, provides ever-shifting highlights of interest and interplay of shadow. It floods the setting with diffused daylight... yet protects privacy.

The distinctive, diamond-shaped, welded wire netting strengthens the entire structure... offers additional protection against breakage... enhances the surface pattern of the glass. Stronger than ordinary glass and with an innate beauty all its own, Misco Wire glass offers endless opportunities for the protection and decoration of the modern home.

Make daylight a part of your plans in your building program. Specify glass by Mississippi. Available in a wide range of patterns and surface finishes at better distributors of quality glass.

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The finishing touches that make sales!

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Smith & Loveless lift stations are quickly and easily installed, saving on-the-job expense. Smith & Loveless stations are delivered direct to your job site, ready to hook up.

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**Publications**

**First standard for heat pumps**

Because of the growing interest in and use of heat pumps, the Air Conditioning and Refrigeration Institute has issued the first ARI Standard on "Unitary Heat Pump Equipment." Numbered 240-57, the new Standard was put out to "establish minimum industry standards of performance of unitary heat pumps and to provide means for establishing reliable ratings." It does not apply to field-modified cooling units that are converted to heat pump operation, or to room air conditioners. 35c.

Air Conditioning and Refrigeration Institute, Washington, D. C.

For copy, write direct to Institute

**Round-up of air control products**

This large (60-page) catalog shows every product in the line of registers, diffusers, and grills made by Air Control Products. The products are illustrated by good-sized photographs, and many of these are accompanied by drawings that are extra help in explaining sizes and installations. Prices are listed. The catalog also has a variety of selection charts, plus some engineering data on types of registers and grills.

Air Control Products, Inc., Coopersville, Mich.

For copy check No. 44 on coupon, p. 200

**Vermiculite in home building**

Vermiculite, in its wide range of applications, is the subject of this 8-page folder. Of particular interest to home builders: sections on gypsum plaster fireproofing and acoustical conditioning. The folder also includes an excellent summary of fire tests, clearly presented in tabular form, and specifications for vermiculite plaster and acoustical plaster.

Zonolite Co., Chicago.

For copy check No. 45 on coupon, p. 200

**The hydronic story**

This colorful 16-page booklet offers a simple explanation of the principles of home heating and cooling, then explains the advantages of doing the job with water (hydronic system). It is in language you or your clients or buyers can understand,

For copy check No. 46 on coupon, p. 200

**Swimming pools for more sales**

"How to get your share of the multi-million dollar swimming pool business" is the subject of this 12-page booklet by Simplex. It points out the dollar and cents reasons for adding swimming pool construction to your line, and gives general advice on how swimming pools are built.

For copy check No. 47 on coupon, p. 200

**Puts Extra BUY-APPEAL in today's homes**

**Majestic CHAR-GRILL Barbecue Grille**

Home buyers everywhere want a built-in barbecue grille

HANDSOME, VERSATILE STYLING—looks at home in any kitchen or recreation room. Designed for installation in masonry construction or in standard wood or metal cabinets.

RUGGEDLY BUILT—made of heavy gauge steel in angle iron type construction. Thick asbestos millboard insulation. Front access door swings on strong piano type hinge. Fire pan made of heavy boiler plate steel.

MANY CONVENIENCE FEATURES—removable fire pan can be raised and lowered, handy front access door, bright chrome grille removable for cleaning.

Majestic's new CHAR-GRILL is getting the nod everywhere — where style-conscious buyers and builders are making plans. Architects, contractors, distributors, dealers and decorators are falling in love with it. Write for specification sheets on the three CHAR-GRILL models and Majestic's own special CHAR-GRILL VENT-HOOD with powerful built-in exhaust blower.

*Editors, too! In coming months, CHAR-GRILL will be featured in many articles and photo spreads in prestige-building publications. Watch for it!"
Don't Make A "Project" Out Of Projects

There is an easy way to build large housing projects consisting of repetitive-type wood frame structures. Whether they be single family units, garden apartments, school class rooms, or military housing . . . this easy way is also the big-profit way.

All you do is let American Houses engineer the project for fast, efficient assembly. Why don't you join the American Houses family of builders who are currently constructing over $45,000,000 worth of housing projects?

If you build east of the Mississippi, send for details.

American Houses, Inc.

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Power tool roundup

This 36-page booklet is a complete catalog of Delta’s Homecraft line of power tools, most of which would find a useful place in the builder's shop. All major tools are illustrated with either a photo or drawing, and many are shown in use. Also shown: a wide variety of shop accessories. Prices included.


For copy check No. 48 on coupon, p. 200

Decorative laminates

Data sheets on decorative laminates gives you information on everything from what they look like to what words to use when you specify them. One booklet has the available patterns, in colors, with details of countertops, walls, baseboard, etc. Two other booklets concentrate on fabrication, and one of these includes the standard phraseology to use in buying or specifying decorative laminates. The fourth deals specifically with decorative laminates on vertical surfaces.

General Electric Co., Coshocton, Ohio.

For copy check No. 49 on coupon, p. 200

Facts on insulating concrete

This 8-page brochure reports with graphs, tables, and photos on insulating concrete produced by Elastizell. It opens with an explanation of the material, how it's made, and what it's good for. It continues with facts and figures on insulating values and structural design, and concludes with specifications. Data are based on research on Elastizell additives done at University of Michigan Engineering Research Institute.

Elastizell Corp. of America, Alpena, Mich.

For copy check No. 50 on coupon, p. 200

Trussed rafter designs

Twelve typical designs are illustrated in the new booklet, "Design and Use of Teco Trussed Rafters." Includes not only the more common pitched and flat trussed rafters, but also designs for trusses for non-loadbearing exterior walls, diamond-shaped trusses, and the 1 1/2-story frame. The page devoted to each design includes specifications and material tables. The new booklet also has data on the methods Teco recommends for fabricating, assembling, shipping and erecting their trussed rafters.

Timber Engineering Co., Washington, D. C.

For copy check No. 51 on coupon, p. 200

Ideas for using plywood

Two new full-color booklets designed to help architects and builders faced with remodeling problems are available, and both have earned awards in the "1957 Ideas for Home Builders" contest conducted by The Producers' Council.

"Family Rooms in Beautiful Weldwood" give 100 illustrated suggestions for remodeled rooms, enclosed waste space, custom-built furniture and cabinets. "Weldwood Prefinished Paneling" catalogs the makers prefinished panels.

US Plywood Corp., New York City.

For copy check No. 52 on coupon, p. 200

Continued on p. 200
for new freedom in kitchen design

Every kitchen in every home you build can offer a custom-designed individuality when you install genuine hand-rubbed natural birch Yorktowne Cabinets.

Yorktowne Kitchens are recognized leaders in beauty, craftsmanship, design, and built-in features.

They are immediately available in 175 cabinet styles and sizes from 50 warehouses across the country.

New illustrated folder gives you the complete story of Yorktowne Kitchens.

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Want more information?

The numbers below are keyed to the items described on the New Products and Publications pages. Circle the ones that interest you and mail the coupon to:

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Before Inland Home Packages are delivered to your job sites, these high-skill Inland men have served you as surely as though they were on your payroll.

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Inland offers you a wide selection of ranch and contemporary models for full basement, crawl-space or slab, 2, 3 or 4 bedrooms, one or one and one-half baths, carports, one or two car garages. Factory-assembled room-size exterior wall sections, 2 x 4 studs, 16" o.c., with choice of factory-applied double-course cedar shakes, board and battens or horizontal siding. Double-hung windows, exterior doors, hardware installed. Complete one-piece built-up gables. Assembled roof trusses, plywood roof sheathing and asphalt shingles.


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Let’s get together. Visit, call or write either of our offices. Inland Homes Corporation, Box 915, Piqua, Ohio (Phone 3880) and Box 137, Hanover, Penna. (Phone Melrose 7-6681).
Open spaces

There seem to be four clear lessons.

Getting something done is (1) primarily a matter of leadership, rather than research. (2) Bold vision, tied to some concrete benefits, can get popular support fairly quickly. (3) The most effective policy is to get the land first and rationalize the acquisition later. (4) Action itself is the best of all research tools to find out what works and what doesn’t.

There is no reason why there cannot be action now. Recently, FORTUNE and ARCHITECTURAL FORUM brought together a group of nineteen experts for a two-day conference on urban sprawl. They came to agreement on the elements of a program that is simple, economic, and politically workable. It uses existing legislative devices, including one rather ingenious one that costs remarkably little. It would not demand the creation of a new level of metropolitan or regional government, and it could be in operation in one year. Here are its provisions.

First, land must be bought.

And it must be bought by an agency with the power and the funds to do it. This means the state because . . .

1. The state is the logical source for funds. Since the open spaces are for the use of the people in the whole metropolitan area as well as the immediate locality, the fact that the funds will be coming out of general revenue means a more equitable assessment of costs. The state, furthermore, can often tap special funds: in California, up to $12 million of the state’s revenue from offshore gas and oil leases can be earmarked for the purchase of recreation areas. In Pennsylvania, all the revenue from oil and gas leases on state-owned land, now about $4 million a year, is allocated to the Secretary for Forest and Waters for reclamation and conservation purposes.

2. Most states already have the necessary machinery for acquiring the land. The No. 1 tool, of course, is outright purchase, with the right of eminent domain available when needed. Outright purchase is obviously appropriate for land that is desirable for an immediate, specific need, such as park space or beaches, and where funds are ready to develop it. For the more outlying areas, the state could do as it has done for future highway rights-of-way: through “advance land acquisition” it can buy areas and then lease them until they are needed.

What may be an even more useful tool, however, is the purchase of development rights. The state would not buy the land but merely buys from the owner an easement—that is, the right to put up developments of any type or billboards. By not exercising the right, the state keeps the land open. The farmland remains in cultivation, and quite aside from the food produced, this is important to the suburbanite. Valuable as landscaped park land may be, the kind of surroundings that most delight many suburbanites are the less antiseptic kind afforded by well-run farms—meadows, cornfields, pastures, well-contoured hillsides, and those disappearing sights, the brook and the spring.

Another kind of land ideal for purchase of development rights is the golf course. Because of the pressure of land values on local taxes, many golf courses have been plowed under by subdivisions, whereupon local residents realize that though they never used it themselves, the golf course made a nice part of their scenery. If a golf club were allowed to sell its development rights, the money would remove the immediate pressures on the golf course to sell the land, and if the club is given adequate tax protection, the long-run pressures should be removed as well.

A surprising amount of land can be got free.

There are people who love their land, and because they do they would like others to enjoy it when they have gone. Given some sort of machinery—and a little salesmanship—many a landowner can be persuaded to deed his estate to the community, or to give it now with the proviso that he can stay on it as long as he lives.

A good example of what can be accomplished by vigorous solicitation is provided by the Massachusetts Trustees of Reservations. In 1891 a group of spirited citizens, with enough foresight to be alarmed even then, put on a vigorous campaign of persuasion, and got many people to donate tracts. Today it has 4,330 acres in thirty different areas, including many historic sites that otherwise would have been long since overrun.

Tax practice should be revised.

If a man keeps his land open by giving his development rights to the community, or selling them (and paying a capital-gains tax), it is patently unfair to tax him at the going rate for developed land. Since property taxes are usually based on market value of the acreage, there would have to be a change in tax-assessment policy. Those who have given up their development rights should have their land assessed at a lower rate than those who have not. In the long run this should involve no loss to the community: the open space afforded would make the surrounding land more valuable, and in time the community’s total tax base should thereby be increased.

Time is a critical factor: if purchase of development rights is started now, considerable tracts of land can be preempted for open space at a fraction of the price that would be asked later. Only a relatively small acreage, furthermore, is needed for an effective open-space plan.

In Montgomery County, Maryland, for example, on the fringe of the Baltimore-Washington metropolitan area, 370 of the county’s 494 square miles remain open farmland. The farmland now sells for about $500 per acre. If action were taken today, the framework of an open-space program could be established with the purchase of a few strategic stream valleys and hilltops totaling about eight square miles, or less than 2 per cent of the county. Cost: about $2,500,000. (Minimum cost of building two miles of expressway: $2 million to $2,500,000.) Bargain or no bargain, the program will take money.

Open spaces are only one part of a decent pattern.

Just as important is what happens to the land in between, and complementing any open-space program must be a strong effort to make development orderly in the unopen spaces. There must be, for one thing, tighter control over subdivision.

At present, most of the communities in the fringe leave things pretty much up to the developer, and the result is often a crazy patchwork of street layouts without any provision for parks or school sites.

Minimum-lot zoning, useful as it may be for a particular neighborhood, provides no real defense against sprawl. The great bulk of new inhabited area that the suburbs create are middle-income people who can’t afford half-acre and one-acre lots, and the U.S. has made so many of them they simply can’t be dammed up. The mass developers leapfrog over pockets of resistance, and instead of an orderly, compact growth outward from a community, the entire buffer area of woods and farms that people took for granted becomes splintered with tract housing. The community does not get penetrated; it gets enveloped.

Of first importance today is the job of preempting open space, for the opportunity is a fleeting one. Before very long the millions born in the postwar baby boom will be coming of age, and as they swell the ranks of homeseekers, suburbia will expand as never before. By that time it may be too late; just in the next few years the highway program will be opening up hundreds of square miles to development, and land that now can be had for $500 an acre will come dear—if it is available at all. Yet the highway program also furnishes a great, fleeting opportunity; its new rights-of-way and interchanges will set the basic structure of the metropolitan areas of the future, and whether those areas will be livable will depend on the foresight of the communities involved as much as it will depend on the engineers. If the communities agree now on a rough idea of what kind of areas they would like them to be, the highway program can become an asset instead of a hazard. / END
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... features like these:

FOUR POINT CONTACT assures positive stability, preventing rock or twist of the panels in operation. This feature is achieved with the two upper adjustable rollers and two adjustable lower guides. Upper Roller assemblies have an adjustability feature (3/8") to assure easy installation and to compensate for out-of-square openings. Lower guides also adjust to the proper depth to noiselessly guide bottom of panel.

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LOWER GUIDES Specially designed steel bracket with polyethylene sleeve—adjusting screw allows 3/4" movement up or down... locks in permanent position.

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ALUMINUM THRESHOLD Decorative and sturdy, it is simply attached to floor. Grooves receive bottom guides to assure panel stability.

STURDY PANEL Hard, smooth hardboard with great structural strength takes any finish to walls.

RIGID STEEL TUBES Used for stiles and rails, they give panel stiffness but allow it to "float" to compensate for expansion, contraction and prevent warpage.

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Here are six rules for planning a safer subdivision

1. **Use three-way, instead of four-way, intersections**

   The diagrams above show one reason why: the four-way intersection has more than five times as many possible conflict points where collisions may occur. Accident rates (based on the Los Angeles study reported in footnote, opposite) prove the point: an average of only six accidents occur per year per thousand three-way (or T) intersections, but 14 times as many take place at four-way intersections, even in curvilinear developments (41 times as many in gridirons).

   Three-way intersections have the added advantage of encouraging drivers to yield the right-of-way. Autos entering the intersections from the dead-end leg must slow down to turn right or left and normally expect to yield to traffic on the continuous street. But at an uncontrolled four-way intersection, indecision is common and can cause accidents.

2. **Use curved streets**

   Traffic experts agree it is difficult for drivers to pick up speed if you use curved street layouts like the one above. Also, people tend to drive more cautiously, especially when the side streets are cul-de-sacs.

   In contrast, gridiron developments with straight streets invite fast driving and through traffic in both directions, and so invite accidents.

3. **Minimize access roads**

   Minimum spacing for the roads that connect your development to nearby highways should be a quarter mile.

   Normally, this spacing will generate enough traffic into and out of your subdivision to warrant a traffic signal at each entry point; but if traffic is permitted to leave the subdivision on roads spaced closer, no one point is apt to have enough volume to warrant a signal.
4. **Eliminate continuous streets**

You invite outside traffic to use your streets as shortcuts to other parts of town when your streets are continuous, particularly when they run between major highways.

The layout shown above uses three basic ways to "break" continuous streets: 1) with cul-de-sac blocks and turnaround loops; 2) with short street runs that connect with other streets in a T intersection; and 3) with 90-degree elbow turns.

5. **Break continuous collector streets**

Collectors are the streets that serve cul-de-sacs and short noncontinuous streets. To be safe, they should exit into only one major street and should not cross through streets. Even long (over eight-block) collector streets have been proven safe when they do not connect at both ends to major highways, and when their only intersections are with short side streets that have low traffic volume.

6. **Avoid irregular intersections like these five**

You will invite trouble with any of the intersections shown above. All have records of many accidents. These dangerous intersections are:

- Multi-legged intersections of more than four legs
- Y-type intersections where two legs meet at acute angles
- Jogs in intersection alignment where the legs are too close together to operate as separate T intersections
- Adjoining intersections too close to operate independently
- Hidden intersections, where visibility is limited by bridges, railroad signs, or heavy growth of trees and shrubs.

**Where do these facts come from?**

These six points are based on a five-year study made by the road department, County of Los Angeles. The study covered 86 residential tracts with a total area of 4,320 acres and a population of 53,000. Gridiron and curvilinear tracts of equal size and population density were used for comparison. Since right-angle collisions represent 84% of all auto accidents within subdivisions, the study was limited to right-angle collisions at intersections.

Results of the study were first published in an article entitled "Subdividing for traffic safety," by Harold Marks, Traffic Survey Engineer, Los Angeles County. It first appeared in the July '57 issue of Traffic Quarterly, published by the Eno Foundation of Saugatuck, Conn. and was reprinted in the October '57 issue of Urban Land.
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